

The NATIONAL WOOL GROWER

VOLUME XXII

NUMBER I

JANUARY, 1932

Wool Growers' Conventions

The Voice of the Industry:
Help Use It.

Attend Your National and
State Conventions

The National: Salt Lake City,
January 11-13, 1932

Idaho: Pocatello, January 8-9.

Utah: Salt Lake City, January 14.

Oregon: Pendleton, January 18-19.

Washington: Yakima, January 21-22.

Montana: Bozeman, January 25-26.

New Mexico: Albuquerque, February 4-5.



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NATIONAL WOOL GROWERS ASSOCIATION
Salt Lake City, Utah

Official Organ of the
NATIONAL WOOL MARKETING CORPORATION
Boston, Mass.

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The NATIONAL WOOL GROWER

Official Organ of the
NATIONAL WOOL GROWERS ASSOCIATION
and the

NATIONAL WOOL MARKETING CORPORATION

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Income and Expenditures of National Wool Growers Association in 1931

THE 1931 budget of the National Wool Growers Association was made up in December, 1930 during the annual convention at Colorado Springs. This was done by the Executive Committee with representatives present from Arizona, California, Colorado, Idaho, Montana, New Mexico, Oregon, Texas, Utah, and Wyoming. The amounts authorized to be expended in 1931, and the amounts actually spent are as follows:

	Budgeted	Spent
Office (Salaries, Rent and Office Expenses)	\$ 10,000	\$ 9,519.29
Organization (including assistance to states in fund raising)	5,000	5,000.00
Legislative	4,000	316.00
Lamb and Wool Marketing	4,000	386.37
Freight Rate Cases	2,000	1,157.97
Lamb Advertising	100,000	19,176.06
TOTAL	\$125,000	\$35,555.69

At the time the 1931 budget was prepared it was anticipated by the committee that some state organizations might have difficulty in raising the full amount of their quotas of the National Budget in the first year of attempting the larger program of work to increase

the demand for lamb. It was, therefore, agreed that each state might pay in one-half of its assigned quota as early as possible and retain the balance until it could be known what payments would be forthcoming from other states. It was impossible to then foresee the low levels of the markets and the financial condition of the industry during the year which just closed. The amounts representing 50 per cent of the state quotas and the amounts paid during the year are as follows:

STATE	50% QUOTAS	AMOUNT PAID
Arizona	\$ 1,650	\$
California	8,021	888.65
Colorado	3,078	2,009.50
Idaho	4,628	4,628.00
Montana	8,000	2,066.50
Nevada	2,238	465.86
New Mexico	5,173	3,000.00
Oregon	5,120	2,039.40
Texas	11,340	11,340.00
Utah	5,132	2,268.00
Washington	1,358	609.85
Wyoming	6,762	2,031.00
Total	\$62,500	\$31,346.76

Editorial Comment on Sheep and Wool Affairs

It is unusually important this year that wool growers should speak plainly in convention resolutions and committee reports upon all matters and practices of concern to the sheep industry.

Convention

Resolutions

The expressions of assembled representatives of any industry are always of importance. Only through them can interested and controlling public opinion be informed as to the condition and needs of the various lines of business and employment. The seldom-seen but all powerful average citizen is controlled in his attitude toward public officials and questions, and in his conception of what is right and fair for his community and country by his information. Varied interests and shades of opinion are continuously diligent in the press and otherwise in putting forward their arguments as to their own importance and claims upon public support. This is sound and fair in our democratic form of government. It requires that each industry, through its official spokesman, be alert and diligent in giving the public the facts regarding its own value and service and in respect to its requests either for legislative or other acts of public officers or administrative bodies.

Convention resolutions and committee reports constitute the voice of industry. Every sheep owner who holds opinions as to what can be done to improve the collective interests of those in the business should set down his proposals and hand them to the secretary of his association for reference to an appropriate committee. Then he should appear before that committee to explain and support his suggestions, and if necessary, discuss the point from the floor when resolutions and committee reports are offered for adoption.

Only in this way can the voice of the industry be made effective in informing those who have a right to know and whom the industry needs to have informed as to its position and needs.

Congress has shown an activity as commendable as it is unusual in dealing with measures necessary to business improvement. In the short period between the opening of the Seventy-second Congress and the holiday recess the President's debt moratorium plan was ratified. The Senate sent the Reconstruction Finance

Congress

Acts

Corporation bill to the House, and from that body a bill to add \$100,000,000 to the capital of the Federal Land Banks was passed and made the subject of hearings by the Senate Committee on Banking and Currency in advance of the recess. Both measures seem

certain to become laws early in January. They will give effect to three of the most important points in President Hoover's 12-point program for business stabilization.

Legislation cannot do the main part of the work required for business recovery, but it can do a great deal in giving confidence to our own citizens and to Europeans as to the soundness and security of the American monetary system and financial institutions.

It becomes increasingly apparent that recovery in this country must, to a great extent, await improvement in international financial affairs, chiefly in Europe. The unpleasant facts over there are becoming more clearly recognized, and more rapid progress in needed readjustments will follow.

Economists conversant with international affairs consider that the United States will lead the movement back to normal business, this to start early in 1932. It

Revising

Prices

is admitted that much more writing off of supposed values must yet be done, especially with real estate bonds. This will probably require some years. It furnishes the basis for the idea that the depression has much farther to go, recently expressed by some financiers who now are as unreasonably pessimistic as they were wildly optimistic a few years ago.

But the return of living prices for ordinary commodities and gain in share values of industrial concerns will not need to await the straightening out of all the mistakes in international and our domestic finances. The essential producing industries have been more than deflated and can be expected to go ahead while for the bad debts and unsound securities the slower but inevitable process of wringing out the liquid adulteration completes its painful course.

Unnecessary concern is being occasioned by the propaganda released in this country upon the meaning of abandonment by Great Britain of her free trade policy. Staunch supporters of free trade, in the Labor and Liberal parties, were forced by circumstances to recognize that some protection in the home markets was needed for British workers.

The British

Tariff

Canada met the situation last year and as Great Britain now has done, adopted the protective policy under which the United States has become strong and powerful, and its industries highly efficient. The actions of these countries have been taken as steps, not of retaliation, but of emulation. If England wishes to

employ her own people in building her own automobiles why should she not do so?

It is not well for one-half the world to have protection for home industry and the other half free trade. The progress of economics and the judgment of practical and constructive thinkers is moving the world toward a policy of rational protectionism. The United States has furnished the outstanding example of free and unrestricted interchange of commodities within a large area of varied resources but common social ideals and aspirations. The American tariff seeks to, and does furnish a preference in home markets to its citizens engaged in lines of production that can economically be carried on here. At the same time it gives free entrance to those necessities which can be more efficiently produced abroad. Witness the fact that 60 per cent of the United States imports are duty free.

The British Empire is moving rapidly toward the creation of another large trade area of similar people, with common ties, customs and ideals. Another great area, the continent of Europe, is working toward the creation of the third of such trade empires. In this case the difficulties are immense. There are hindrances in the drastic application of tariffs by too small countries unable to produce the main part of their requirements.

There has been some waste through transportation of commodities that could be grown or made nearer to where they are consumed, involving problems of exchange and the balancing of trade that need not arise except in the interchange and transportation of materials deemed essential for use and consumption in countries unable to produce them.

Great Britain's new tariff policy is a move in compliance with the teachings and requirements of modern economic thought and efficiency. It holds no threat or danger to the United States. It will extend to other parts of the world. Its

Sheepmen's Calendar

CONVENTIONS

Idaho Wool Growers, Pocatello—January 8-9, 1932.
National Wool Growers Assn., Salt Lake City—January 11-13, 1932.
Utah Wool Growers, Salt Lake City—January 14, 1932.
Oregon Wool Growers, Pendleton—January 18-19, 1932.
Washington Wool Growers, Yakima—January 21-22, 1932.
Montana Wool Growers, Bozeman—January 25-26, 1932.
New Mexico Wool Growers, Albuquerque—February 4-5, 1932.

SHOWS AND SPECIAL EVENTS

Ogden Livestock Show, Ogden, Utah—January 8-14, 1932.
National Western Stock Show, Denver, Colo.—January 16-23, 1932.
American National Live Stock Association, San Antonio, Texas—January 27-29, 1932.

further adoption, if based on the theory and practical workings of the American protection policy, will bring untold benefits to efficiency in the productive enterprises of all nations and to international commerce as well.

President Hoover's 12 Point Program

A PROGRAM for business improvement, practical, sound, constructive, and statesmanlike, was announced by President Hoover on December 11.

Many of the ideas and proposals had been the subjects of earlier statements from the White House. Most of them were taken up in the presidential message to Congress or in later special communications on the budget and other matters. They were listed on December 11 to give a quick view of the entire plan in preparation of which there had been exhaustive study and numerous and lengthy conferences and consultations with the most competent men of all lines and from various countries.

The 12 points are:

1. Provision for unemployment relief through local authorities, working cooperation with the presidential Gifford committee.

2. Provision for part time work by employers instead of adhering to the old system of laying off entirely a portion of a working staff.

3. Strengthening of the federal land bank system in the interest of the farmer.

4. Assistance to home owners through creation of a home loan discount bank system.

5. Development of a plan to permit payment of depositors by closed banks whose assets are "frozen."

6. Enlargement of the federal reserve discount facilities to help loosen credit.

7. Creation of the recently proposed reconstruction finance corporation, designed to aid agricultural organizations, industries, railways and financial institutions.

8. Assistance to railways, through protection from unregulated competition and by aid to weaker roads through a credit pool.

9. Revision of banking laws to safeguard depositors.

10. Safeguard and support for banks through the recently formed National Credit Association.

11. Maintenance of federal finances on a "sound basis" by (a) drastic governmental economy, (b) "resolute opposition to enlargement of federal expenditures until recovery," (c) a temporary increase in taxation.

12. "Maintenance of the American system of individual initiative and individual and community responsibility."

At the same time the President said:

The broad purpose of this program is to restore the old job instead of the create a made job, to help the worker at the desk as well as the bench, to restore their buying power to the farmers' products—in fact, to turn the process of liquidation and deflation and start the country forward all along the line.

This program will affect favorably every man, woman and child—not a special class or any group. One of its purposes is to start the flow of credit now impeded by fear and uncertainty, to the detriment of every manufacturer, business man and farmer; to reestablish normal functioning is the need of the hour.

There appears to be ample support in Congress for quick action upon all points of the program calling for legislation. Unusual progress was made in the short period of the session last month.

It is plain that a majority of both parties are ready to meet the challenge to their capacity and readiness for constructive work.

PROGRAM

of

Sixty-Seventh Annual Convention

of the

National Wool Growers Association

SALT LAKE CITY, UTAH
JANUARY 11, 12, 13, 1932
(HEADQUARTERS, UTAH HOTEL)

Reduced Rates over All Railroads to Persons Buying Tickets to Salt Lake for Convention Dates
FARE—Round Trip Tickets at Cost of Regular One-way Fare Plus One-half Fare

Subjects of Addresses, Discussions, and Committee Reports

Some of the Speakers

	President F. J. Hagenbarth S. W. McClure
The Federal Farm Board.....	C. B. Denman, Federal Farm Board, Washington, D. C.
Charges at Public Stockyard Markets	A. W. Miller, Chief, Packers and Stockyards Administration, Washington, D. C.
The Wool Manufacturer and the Wool Grower.....	Col. Chas. F. H. Johnson, President Botany Worsted Mills, Passaic, New Jersey
Four Years' Work in Promoting Lamb Consumption	R. C. Pollock, General Manager, National Livestock and Meat Board, Chicago
Plans and Results of the Omaha Lamb Sales Campaign.....	Erle M. Racey, Account Manager, Tracy-Locke-Dawson, Dallas, Tex.
The Record of Lamb Supplies and Prices.....	C. A. Burmeister, Bureau of Agri- cultural Economics, U. S. De- partment of Agriculture
Livestock Financing Through Intermediate Credit Banks.....	A. C. Williams, Federal Farm Loan Board, Washington, D. C.
The National Wool Mar- keting Corporation	Paul Draper, President, Draper & Co., Selling Agents, National Wool Marketing Corporation, Boston
The Lamb Feeders' Interest in Advertising Work.....	H. W. Farr, President Colorado- Nebraska Lamb Feeders Associa- tion, Greeley, Colo.
	Nate C. Warren, Fort Collins, Colo.
Proposed Legislation on Public Domain.....	

Committee Meetings

National Lamb Council (Advertising Committee)—January 10, 2 p. m.
Executive Committee—January 10, 8 p. m.

MONDAY, JANUARY 11, 4 P. M.—First Sessions Convention
Committees on Public Lands, Forest Grazing, Lamb Markets,
Wool Marketing, Predatory Animals,
General Resolutions

Entertainment

*Furnished by Utah Wool Growers Association
and Salt Lake Chamber of Commerce*

Special Organ Recital at Mormon Tabernacle
—Monday at Noon

Dinner-Dance and Entertainment and Wool
Fashion Show—Tuesday Evening

Complimentary Luncheon—Wednesday Noon,
Chamber of Commerce

Additional Announcements at Convention

Luncheon for the Ladies as Guests of the Salt
Lake Auxiliary Chapter to the Utah Wool
Growers Association—Tuesday at Noon

Ladies' Auxiliary

MONDAY MORNING—Joint Meeting with Na-
tional Association

MONDAY AFTERNOON—Public Lamb Demon-
stration, Hotel Utah Roof Garden. Miss
Marion Hepworth of the University of
Idaho in charge.

TUESDAY MORNING—A Talk on Wool and Its
Uses by Mrs. Lutie H. Fryer, Professor of
Textiles and Clothing, University of Utah

TUESDAY NOON—Luncheon - Meeting. Salt
Lake Chapter Hostess. Talk on What an
Auxiliary Can Do for the Association by
Mrs. Harlan Hill, former president, Na-
tional Auxiliary.

WEDNESDAY MORNING—Reports from Presi-
dents and Representatives of All State
Organizations.

WEDNESDAY AFTERNOON—Entertainment to
be announced.

The Colton and Evans Grazing Bills

Two Bills Now Before the Congress—Western Stockmen Vitaly Concerned

A BILL to permit the control of grazing on the public domain by advisory boards selected by local associations was introduced in Congress last month by Mr. Colton of Utah, until this session chairman of the House Committee on Public Lands.

Congressman Evans of Montana now is chairman of the Public Lands Committee. He introduced a bill which carries the recommendations of the Public Domain Commission, printed in the April issue of the *Wool Grower*. The main feature of that report and of Mr. Evans' bill is the proposal to transfer full title and control of surface rights on all unreserved public lands to the states in which they lie. The text of the Evans bill also appears below.

A bill passed by Congress in March, 1928 authorized the creation by the Secretary of the Interior of a grazing reservation in the Mizpah Pumpkin Creek area of Montana, to be controlled by an advisory board elected by the members of the association in accordance with regulations prescribed by the Secretary of Interior.

The Mizpah-Pumpkin Creek Grazing Association was organized in 1928 and for three seasons its officers have regulated the grazing of 5,000 cattle owned by 30 members. The area controlled by the association includes 108,000 acres. Of this 73,000 acres are railroad and 30,000 acres government lands.

Mr. Colton's bill would provide for establishment of such areas anywhere and of any size to be controlled by the users in accordance with the regulations prescribed by the Department of the Interior.

The Colton Bill

H. R. 4541

A BILL

To develop the grazing resources of the unreserved public lands, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled;

Section 1. That the Secretary of the Interior is hereby authorized and directed to designate districts to include the unreserved, unappropriated public domain in any or all counties of the states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming, in which title to more than 10 per cent of the area not included in federal reservations remains in the United States; and thereafter such public lands, including withdrawn lands that may be used for grazing without material interference with the purposes for which reserved, shall be administered for grazing purposes under such general rules and regulations as said secretary may prescribe.

Sec. 2. That the bona fide owners, users and residents of agricultural or grazing lands within the limits of any district hereby authorized and designated may unite in selecting a district advisory board of five members to act as advisor to the Secretary of the Interior in the administration and disposal of the public lands of said district.

Sec. 3. That the public land laws shall be unaffected by the provisions of this act and shall continue in operation except that each and every application for nonmineral title to public land in a district created under this act shall be accompanied by a written recommendation of the district advisory board, if such exists, and shall be allowed only if, in the opinion of the Secretary of the Interior, the land is of a character suited to disposal through the act under which application is made, and such entry and disposal will not affect adversely the best public interest; provided, that as to agricultural and grazing lands, private ownership, except as to such areas as may be advisable or necessary for public use, shall be the objective in the final use and disposition of the public lands.

Sec. 4. That the Secretary of the Interior be and he is hereby authorized in his discretion to accept on behalf of the United States, title to any lands within the exterior

boundaries of any district designated under this act owned by states, railroads, corporations or private individuals, and in exchange therefor may patent to such grantors not to exceed an area of equal value of unreserved public land, nonmineral in character, either within or without the districts created under this act, but wholly within the limits of the state within which such district is located, provided that before any such exchange is completed, notice of the proposed exchange shall be published once each week for four successive weeks in some newspaper of general circulation in the county or counties in which are situated the lands to be given in such exchange. Lands conveyed to the United States under this act shall, upon acceptance of title, become subject to the provisions of this act.

Sec. 5. That the secretary of the interior is also hereby authorized to enter into cooperative agreements with states, railroads, corporations or individual owners of lands within the limits of any district designated under this act whereby such lands and the lands within the same area belonging to the United States may be jointly used for grazing purposes under such rules and regulations as the secretary of the interior may prescribe.

Sec. 6. That the secretary of the interior is authorized to make necessary and proper rules and regulations and to do any and all things necessary to carry out and accomplish the purposes of this act; provided, that he is authorized to cooperate with any department of the government in carrying out the purposes of this act with a view to securing the fullest possible benefit to the government and the livestock industry of such studies as may be made of the operation and results of districts created, regulated and administered under the provisions of this Act.

The Evans Bill

H. R. 5840

A BILL

To grant vacant, unreserved, unappropriated, nonmineral lands to accepting states, and to authorize the President to establish national ranges in nonaccepting states; to create a board authorized to determine as to the disposition of certain areas of public domain; to enable the United States, the states, and individuals to exchange lands for the consolidation of mingled areas, and granting lands to certain states to achieve that purpose; to provide for the control, disposition, and protection of stock-watering places and of intrastate and interstate

stock driveways; and for the conservation of grazing resources, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby granted to the respective public-land states all vacant, unappropriated, and unreserved nonmineral public lands of the United States, except as herein otherwise provided, within their respective boundaries, conditioned, however, that in order to make this grant effective, the states accepting it shall so signify by legislative act and shall transmit to the President of the United States a copy of such act, signed by the governor and attested by the great seal of the state which, when received by the President, shall operate as an application for the clear listing of the lands herein granted, and the proceedings thereon shall follow under the direction of the Secretary of the Interior as in the case of selections heretofore made by public-land states under non-mineral state land grants: *Provided, however*, That if it appears that lands have been classified as mineral in character, title in fee simple to lands so classified shall pass to the accepting state subject to the reservation in the United States of any specified mineral or minerals described by such mineral classification and with the further reservation in the United States, its permittees, lessees, or grantees of the right to enter upon the lands, to prospect for, mine, and remove the mineral or minerals so specifically reserved, and subject further to the acquisition of rights or easements under laws of the United States applicable for rights of way for railroads, highways, reservoirs, ditches, canals, electrical power plants and transmission lines, telegraph and telephone lines, airports and beacon stations, authorized to be granted under any of the laws of the United States, and subject to and burdened with all prerogatives, restrictions, and limitations heretofore created or imposed by the United States in or upon, or attached to, the present or future use, or uses of the lands herein granted necessary or important for the fulfilment of any obligation and/or duty assumed by the United States to foreign nations, states, or individuals. This grant as herein conditioned shall pass title to the accepting states to the unsurveyed as well as surveyed vacant, unappropriated, and unreserved public lands, as of the date of acceptance and shall be clear listed, when surveyed, as to all adverse rights or claims in existence as of said date and valid under the laws of the United States, by the procedure for clear listing under the direction of the Secretary of the Interior as in the case of other surveyed lands.

Sec. 2. That the lands herein granted to accepting states and the natural products and money proceeds therefrom shall be held in trust by the said states for the support and maintenance of common schools and higher educational institutions and there

shall be established in the State university, or in any State college designated by the State Legislature, a department to be devoted to the study of range conditions and improvement and the dissemination of knowledge concerning watershed protection, prevention of erosion, flood control, and conservation of grazing, for which purposes there shall be devoted not less than 5 per centum and not in excess of 20 per centum of the gross income derived by the accepting state from the lands, or proceeds thereof, herein granted and there shall be set aside by the State legislature from the lands herein granted two or more agricultural and/or range experiment stations which shall be administered by the department so created for the purposes mentioned.

Disposition of any of said lands, or of any money or thing of value directly or indirectly derived therefrom, for any purpose or purposes other than that specifically provided for herein, or in any manner contrary to the provisions of this Act, shall be deemed a breach of trust, and it shall be the duty of the Attorney General of the United States to prosecute in the name of the United States and in its courts such proceedings in law or in equity as may be necessary and/or appropriate to enforce compliance with the terms of this trust and any and all conditions in this Act attached to the execution thereof.

Sec. 3. The accepting state shall not hypothecate or in any manner directly or indirectly pledge as security the lands herein granted, and they shall not be sold or otherwise disposed of except to the highest and best bidder at a public auction to be held at the county seat of a county wherein the lands to be offered, or the major portion thereof, shall be located, notice of which public auction shall first be given by advertisement setting forth fully the nature, time, and place of the transaction with a full description of the lands to be offered, to be published once each week for not less than four successive weeks prior to the date of sale in a newspaper of general circulation published regularly at the State capital and in a newspaper of like circulation which shall then be published nearest to the lands so offered: *Provided*, That nothing herein contained shall prevent said state from leasing for any purpose the lands herein granted for a term of five years, or less, with the option in the lessee, his successors or assigns, to renew for a like period, or successive like periods upon such terms as the legislature may prescribe, without said advertisement.

No lands shall be sold without reservation of minerals in the state and none disposed of for less than \$3 per acre, and none shall be sold; nor any estate nor interest therein alienated or disposed of, except pursuant to general laws providing for such sale, alienation, or disposition: *Provided, however*, That when the legislature so provides any accepting state may sell to bona

fide settlers for a price per acre less than said minimum price lands within areas where the annual rainfall averages four inches or less.

A fund shall be established in which the state treasurer shall deposit all moneys derived from any of said lands, and he shall invest and reinvest the same in safe interest-bearing securities which shall first be approved by a state board of finance composed of the governor, state attorney general, and three others to be selected as directed by the state legislature, and only the income therefrom shall be devoted to the uses and purposes of the trust by this Act created and established in perpetuity: *Provided, however*, That revenue derived solely from rentals from and bonuses for leases shall be considered as income and may be expended as in the case of income from the investment of principal.

No part of the proceeds in any manner derived from lands herein granted shall be used to aid or support any sectarian or denominational educational institution.

Sec. 4. At any time after the passage of this Act any public-land state, in lieu of accepting the grant defined in Section 1 of this Act, may make application through any state official, authorized thereto by the state legislature, to the President of the United States for the designation of the vacant, unreserved, unappropriated public lands in such state as a national range and upon such application the President is hereby authorized to so establish by Executive order such national range and to assign the administration of the same to such department as he may determine, and he may include in such lands all public lands withdrawn for minerals or other purposes when the use of the land for grazing is not inconsistent with the purpose and/or paramount uses of the withdrawal.

Sec. 5. In the absence of any legislation by any public-land state, as provided for in this Act, after ten years from the approval of this Act, the President of the United States is hereby authorized by Executive order to establish a national range within such state comprised of all of the then vacant, unreserved, unappropriated public lands within its boundaries, and he may include therein all lands withdrawn for mineral or other purposes within said state whose use for grazing is not inconsistent with the purpose and/or paramount uses of the withdrawal, and to assign the administration of the same to such department as he may determine: *Provided, however*, That is the state within which such public lands are located has in force laws regulating the movement of livestock upon such lands which are applicable equally to interstate and intrastate movements of stock, then such national range shall not be designated unless upon the request of the interested state and such regulatory laws shall be recognized when not in conflict with Federal laws.

Sec. 6. There shall be excepted from the grant made in Section 1 of this Act the areas of vacant, unreserved, unappropriated public lands depicted and described on that certain map or plat known as map Number 1 and entitled "Areas Proposed by Forest Service as Additions to Existing National Forests or for Establishment of New National Forests," as the said map Number 1 appears of record and on file in the General Land Office, until such time as it shall be determined, as hereinafter provided, what shall be added to the national forests from the vacant, unreserved, unappropriated public lands so shown on said map Number 1, and when such determination has been made the lands remaining shall pass to the accepting states as provided in Section 1.

Sec. 7. There is hereby created a board for each public-land state having within its boundaries in excess of four hundred thousand acres of vacant, unreserved, unappropriated public lands at the date of the approval of this Act, which shall be composed of five members, one appointed by the President of the United States, one by the Secretary of the Interior, one by the Secretary of Agriculture, and two by the governor of the state.

It shall be the duty of said board, within one year from the date of the approval of this Act, to determine and report to the Secretary of the Interior (1) what, if any, areas of the vacant, unreserved, unappropriated public lands shown in map numbered 1 should be added to existing national forests. Additions to national forests should be limited to areas chiefly valuable for forest purposes except upon the request of the state involved; (2) what, if any, areas not chiefly valuable for forest purposes, including watershed protection, within existing national forests should be returned to the public domain; (3) what consolidation of areas can be brought about to correct and round out the boundaries of national forests; (4) what reservations or withdrawals of areas of the vacant, unreserved, and unappropriated public lands should be made for national defenses, reclamation purposes, reservoir sites, national parks and monuments, airport and beacon stations, and migratory-bird refuges.

Lands in each state not included in existing national forests under (1) and excluded from existing national forests under (2) shall be and become included within the terms of the grant in Section 1 of this Act and shall pass to accepting states as therein provided.

Lands selected by the board under (4) shall be excluded from the grant in Section 1 of this Act, provided the selection shall be filed with the Secretary of the Interior prior to the clear listing to the accepting State of the lands so selected.

If a majority of the board, or in the case of a selection for national defense, and/or for reservoir sites on interstate streams, two members thereof, concur in a request that

a described area be reserved for any purpose detailed in (4) and be excluded from the clear listing procedure initiated by the accepting state until further study can be given the subject, then the Secretary of the Interior shall exclude such described areas from the clear listing procedure and shall determine whether such areas shall in fact be excluded from the grant in Section 1 of this Act or shall pass to the accepting state.

It shall be the duty of the board to recommend to the Secretary of the Interior the return to the public domain of areas not involved in (1), (2), (3), and (4) above, but within existing reservations, withdrawals, and classifications, which, in the opinion of the board, has ceased to be of use or useful for the purposes of such reservations, withdrawals, and classifications, and to the extent that the Secretary of the Interior shall approve the recommendations so made the land affected shall be eliminated from existing reservations, withdrawals, and classifications and shall pass to the accepting states pursuant to Section 1 of this Act.

Sec. 8. The secretary of any department of the government having administrative charge of any lands of the United States is hereby authorized to exchange any of such lands with states and private owners for lands of equal value for the purpose of consolidating ownership for more effective utilization and/or administration. In grazing areas where grazing use has been long established, no exchanges shall be made without due consideration of that fact and none completed until after hearings are accorded to those affected by the proposed exchanges and their equities safeguarded in so far as it is possible to do so.

Any Act of Congress granting lands to any state containing restrictions or limitations upon the power of the state to alienate or dispose of such lands is hereby amended so as to enable such state to amend its constitution to the extent necessary to authorize making exchanges of lands as provided for in the preceding paragraph.

As to lands granted in Section 1 of this Act, the accepting state may exchange any of such lands with the United States or private owners for lands of equal value for the purpose of consolidating ownership of state lands: *Provided*, That the lands acquired as the result of such exchange shall be impressed with the same trust and subject to the same conditions as to sale or other disposition by lease or otherwise as the base lands used to effect the exchange.

Sec. 9. That states not accepting the grant of lands in Section 1 of this Act may consolidate presently owned state lands with adjacent and/or near-by contiguous areas of vacant, unreserved, unappropriated public lands by selecting isolated areas of such public lands not in excess of four sections in any one township within the state such as if consolidated with adjacent and/or near-by contiguous areas of state land

would accomplish the end to be served; and there is hereby granted to such state said lands so selected to be clear listed to the state, when and if declared to be non-mineral lands under the direction of the Secretary of the Interior. The lands so granted shall be subject to the trust imposed upon the lands granted in Section 1 of this Act and to all the restrictions and conditions attached thereto saving and excepting the obligation to create and maintain agricultural and range experiment stations.

Sec. 10. That present withdrawals and reservations for the protection of stock-watering places and for stock driveways when wholly intrastate shall upon application of the state wherein they are located and a showing in support thereof that they are no longer required for those purposes be returned to the public lands at the discretion of the Secretary of the Interior and pass with the grant made in Section 1 of this Act; and at the request of any non-accepting state the Secretary of the Interior may in his discretion relocate and/or create stock driveways which are interstate. Where stock driveways are interstate the states involved are hereby authorized and empowered to enter into compacts providing for their use, control, and protection, but such compacts shall not become effective for any purpose until approved by Congress. No interstate stock driveway shall pass to an accepting state under the provisions of this Act and none shall be restored to the unreserved, unappropriated, public domain without an Act of Congress authorizing it.

Sec. 11. This Act shall not be construed as expressly or impliedly repealing the whole or any part of any laws now in force providing for Federal aid for the construction of highways in public-land states.

Lamb Chart Issued

A TWO-COLORED chart, showing the appearance, name and weight of the 15 retail cuts in a carcass of lamb is being distributed by the Institute of American Meat Packers. The chart is similar to the one prepared and also being distributed by the National Live Stock and Meat Board. The Institute's edition of the chart, however, is printed in 7 inches by 11 inches size and is having a wide distribution especially to schools and colleges.

Around the Range Country

Wyoming

Temperatures were near or somewhat above normal most of the time, with only a few cold days in which livestock required extra feed or showed the effects of the cold spell. No excessively cold weather occurred. The coldest weather occurred over the higher, western portions where snow cover was continuous and general. A chinook brought Cheyenne its warmest December day of record on the 18th. Light snow covering, with some bare ground, is reported over most eastern counties. Livestock are wintering in fair to good condition.

Rawlins

There has been a lot of snow during December in some places and not so much in others, and the prospects for winter range feed is bad. Hay is \$12 a ton.

I think there will be about the same number of ewes bred this year as last.

There hasn't been much of a reduction in production costs yet.

Coyotes are not giving us as much trouble as usual.

James Lamont.

Montana

Most of the month has been rather mild, or the cold spells were of brief duration, though snow covers the state generally, in places several inches deep. However, chinook and other warm winds reduced the snow layer, and permitted livestock to hold their own, in fair to good condition. After the last warm spell the ground was bare locally in middle and eastern counties. Livestock feeding has continued pretty steadily.

Freedom

Weather conditions have been excellent (December 9), but the feed is very poor; the winter range is anything but promising.

Not so many lambs are on feed around here as last year, and a larger number of ewe lambs were sold this fall than in 1930. Some crossbred yearling ewes are selling at about \$4, and the same price is being paid for two- and three-year-olds. Two fifty is taking those of mixed ages.

Fewer ewes are being bred this season.

No reductions have been made in charges for pasture or grazing lands. Hay is priced at \$17 a ton, delivered.

P. C. Davis.

Idaho

Three weeks of exceptionally cold weather were followed by a brief spell of mild temperatures, which relieved the increasing stress on livestock. Much clear weather prevailed, though rain or snow occurred generally, and moisture is available on the winter grazing areas. Livestock are mostly on feed and doing well, though feed shortages are reported in some southern sections. Light rains occurred in western counties toward the close, and mild, snowy or rainy weather in the east.

Driggs

Winter has set in here (December 8) and no winter range is available.

THE notes on weather conditions, appearing under the names of the various states are furnished by J. Ceell Alter of the U. S. Weather Bureau and based upon reports and publications of that bureau for the month of December.

The Wool Grower welcomes and desires communications from interested readers in any part of the country for this department of the Wool Grower and also invites comment and opinions upon questions relating to the sheep industry and statements of occurrences of importance and significance to wool growers.

Alfalfa hay can be had at \$8 to \$10 a ton.

There have been no recent sales in ewes of any description. I think that fewer of them are being bred this season, and a larger percentage of ewe lambs were marketed this fall than usual.

I do not believe that many sheepmen of this locality will be able to meet the interest on their indebtedness this year.

Chas. Christensen.

Washington

During the first half of the month cold weather with considerable snow cover over eastern counties necessitated increased livestock feeding, though animals mostly held their own satisfactorily. Over the western portion rains were of occasional occurrence, and as the weather was milder livestock fared better. Later in the month additional rains and much warmer weather generally, carried away much of the eastern snow cover, and was fine for livestock as a rule. Sheep and cattle went again onto winter ranges to forage, excepting at the higher elevations.

Ellensburg

Ninety per cent of the sheep have been on hay for nearly a month, due to a six-inch snowfall. The grass on the range had a good start when the snow came and if the snow isn't taken off by Chinook winds we will have better feed next spring than we have had in years. From \$5 to \$7 is being asked for alfalfa hay in the stack (8 square feet).

The government trappers have the coyotes cleaned up better than in any time during the past 40 years. All we need is to have the legislature appropriate a little more money to help the government get more trappers.

State land leases have come down from \$64 a section to \$40. Many

stockmen, however, have cancelled their leases because they could not pay the rental charges themselves and were unable to borrow from the banks.

Oregon

Most of the month was characterized by heavy snow covering over the state, but later, warm rainy weather was rather persistent, carrying away much of the snow at lower levels, and as there was little wind, the rains were not especially bad on livestock. Feeding has been general, and most animals are in satisfactory condition; some of them being on pastures or ranges since the snow layer was reduced, and since the rains in the western portion.

Hermiston

There is plenty of feed on the winter range (December 4). Alfalfa hay is selling at \$6 a ton in the stack.

Yearling fine wool and crossbred ewes are selling around \$4 and \$5 a head; two- and three-year-olds at \$4, and mixed ages at \$1 and \$2. Fewer ewes are being bred this fall, and I think a larger number of ewe lambs went to market than a year ago. Not so much local feeding of lambs is going on around here this year as in 1930.

Thomas Campbell.

Richland

We have had good feeding weather since December 1; we usually feed here about 3½ months. From present indications our spring range should be good. Alfalfa hay can now be had at \$8 to \$10 per ton in the stack.

Fewer ewes are being bred this fall.

I can't see much difference in the coyote situation; they are bothersome every year. We need a bounty on coyotes, then the local trappers would work harder.

Haven't noticed any change in the rates for grazing leases on state, railroad or private lands.

Production costs have not been

reduced very much, 50 cents per head, and possibly \$1 in some localities.

W. E. Farley.

California

Subnormal temperatures have persisted, with frequent heavy to killing frosts in many sections, checking the growth of forage grasses and shrubs. Rains have been frequent, and over the northern portion rather heavy, affording ample moisture for grasses. The warmth of the last week has aided ranges as grasses have made better growth. Livestock are mostly in satisfactory condition.

Los Banos

We have had just enough rain recently to force the sheep out of the stubble fields and on to the winter range. It is too cold for the feed to grow, and we are lambing on hay and grain. Hay is selling from \$8 to \$10 a ton in the stack.

All of our ewe lambs were sold last season. Now yearling fine wools are changing hands at \$7 a head; the same price is being paid for crossbreds; \$6 is taking two- and three-year-old fine wools and \$5 crossbreds of the same age. Ewes of mixed ages are going at \$4.

There has been a very small decrease in rental charges on pasture lands, but with the present returns on sheep raising, even the lower costs cannot be paid.

Frank J. Arburua.

Nevada

The early part of the month was unusually cold, but it was a steady cold, without wind or fluctuation detrimental to cattle. However, some animals had began to show the effects of the prolonged cold spell when in the third week the mild weather set in which has continued to the close, relieving much of the stress. Heavy cattle feeding has been continued pretty generally, and movement of sheep to coast

markets has been general. The snow cover has now largely disappeared, though enough remains for livestock moisture where animals are foraging. Livestock are mostly in satisfactory or fair condition.

Wells

Sheep are doing fairly well on the desert this winter so far, with just enough snow, but there are many more sheep there than usual, due to the fact that many men that have been feeding their sheep in other years have not had the money to buy feed this season. It also is partially true that there might be danger of feeding more into the sheep than they are worth.

December has been very cold, but now (the 21st) it has moderated a little.

About 10 per cent more ewes are being bred this season.

I haven't heard of any changes in the rates on grazing leases in the state.

We are having a nice storm now which makes the new year look more promising.

My estimate is that sheepmen have cut their expenses by about 8 per cent.

Vance Agee.

Ely

We have had a lot of cold weather and there is very little feed now (December 1). Alfalfa prices range from \$10 to \$12 a ton.

Quite a bit more lamb feeding is being done in this vicinity than last year. There hasn't been much of a market for ewes and as a result more of them are being bred than ordinarily. For good young ewes, \$5 is being paid. Most of the ewe lambs were kept on account of the poor market.

There has been no change in grazing land and pasture charges.

In my opinion, only about one per cent of the sheepmen will be able to pay the interest on their indebtedness.

James Doutre.

(Continued to page 35)

Livestock Marketing

IN an address before the Institute of American Meat Packers in New York on October 19, Mr. Denman said:

In contrast to the cyclical upswing of cattle and hog production, sheep numbers are likely to decline markedly during the next two or three years. The 1931 lamb crop was of record size, being 8 per cent greater than the large crop of 1930. Lamb prices at levels below production costs, together with feed shortages in many range areas, however, are causing western sheepmen to market more than the usual proportion of the crop and to hold back fewer ewe lambs for breeding.

With light marketings of ewes during the fall of 1930 and abnormally light death losses last season, the age of range ewes has increased materially and should the coming winter be severe, heavy losses will be inevitable, especially in sections where feed supplies are short and poor financial circumstances make it practically impossible for sheepmen to give their flocks adequate care. Hence sheep and lamb slaughter during the next few years will not necessarily reflect the heavy liquidation impending in the industry. * * *

Rapid progress toward orderly and efficient marketing is being made in the livestock industry, a marked growth in co-operative marketing greatly facilitating this forward stride. Unsatisfactory returns for livestock due to fluctuating supplies, high marketing costs, and an unwieldy and inefficient marketing system in general have emphasized to farmers the need for cooperative endeavor.

We producers have learned that our interests are mutual and that we must pull together, not against each other. Comprehensive and effective organization is pertinent to stability in both production and in marketing. Advancement toward that goal is evidenced by the establishment of the National Livestock Marketing Association, owned and controlled by over 300,000 livestock producers scattered from the Atlantic to the Pacific and from Canada to the Rio Grande.

This association, national in scope and operating in the field as well as at terminal markets, is able to put livestock supplies for the country in contact with the most favorable demand outlets. There is being set up in the National Livestock Marketing Association a sales advisory service which will assist its member cooperative associations in coordinating the marketing and distribution of livestock. * * *

During the past few days we have heard a lot about a certain great credit corporation being set up which will greatly help industry. As I read the business page of

the metropolitan papers this morning they indicated that it was having some effect.

More than a year ago the Federal Farm Board assisted the livestock industry in developing a similar plan which the livestock industry has been furnished as a shock



C. B. DENMAN

Member of the Federal Farm Board, who is to address the convention of the National Wool Growers Association on cooperative marketing of livestock and the operation of the National Livestock Marketing Association

absorber. In this we have assisted in coordinating, organizing and putting into effect the plan which ultimately should put the livestock producers in a position to furnish the necessary financing to stabilize, to a large extent, the livestock industry, through the establishment of large regional credit corporations, under their own ownership and control. * * *

Value of Grain Crops and Livestock

IN the past seven years the grains have accounted for 12.5 per cent of the aggregate farm income of the United States; cattle, hogs and sheep for 23.4 per cent, dairy products for 16.4 per cent, cotton and cottonseed for 12.3 per cent, and poultry and eggs for 9.9 per cent; vegetables and fruits and nuts account for the remainder.

(National City Bank Letter)

A Reconstruction Finance Corporation

BILL No. 1 introduced in the Senate at the convening of the Seventy-second Congress was entitled:

A Bill

To provide emergency financing facilities for banks and other financial institutions, and for other purposes.

The author is Senator Walcott of Connecticut. This bill is the first and basic point of the legislative part of President Hoover's program of aiding business. The war debt moratorium having been disposed of in Congress before the Christmas recess, it was considered certain that the Reconstruction Finance Corporation bill would be reported from committee and ready for a vote in the Senate early in January.

In general, the bill is proposed to do for railroads, agricultural finance concerns and loan companies and banks in general, substantially what was done by the revived War Finance Corporation created under the Act of 1915 and renewed in 1921.

This consists of the furnishing of loans to capitalize discounting corporations which will take sound paper of various classes from banks needing funds but unable otherwise to dispose of paper representing loans. The availability of this service will in a large way so restore confidence as to render unnecessary the actual discounting of much of such paper. Testifying before a Senate committee, Charles E. Mitchell of the National City Bank said: "The sooner such a corporation is ready for operation, the less work it will need to do."

The work of the old War Finance Corporation was largely planned and conducted by Eugene J. Meyer, who later was chairman of the Federal Farm Loan Bureau, and now Governor of the Federal Reserve Board.

The Walcott bill proposed to provide \$500,000,000 of govern-

ment funds to capitalize the Reconstruction War Finance Corporation. The management of the corporation would be "vested in a board of five directors consisting of the Secretary of the Treasury, the Governor of the Federal Reserve Board, and the Farm Loan Commissioner (chairman of Federal Land Bank Board), who shall be members ex-officio, and two other persons appointed by the President of the United States, by and with the advice and consent of the Senate..

Very broad powers would be granted to the corporation under Section 5 of the Walcott Bill:

The corporation is authorized and empowered to make loans, upon such terms and conditions not inconsistent with this Act as it may determine, to any bank, banker, savings bank, trust company, clearing house or other association of banking institutions, building and loan association, insurance company or other financial institution in the United States (herein referred to as financial institutions). All such loans shall be fully and adequately secured in such manner as the corporation shall require. The corporation, under such conditions as it shall prescribe, may take over or provide for the administration and liquidation of any collateral accepted by it as security for such loans. Such loans may be made directly upon promissory notes of such financial institutions, or by way of discount or rediscount of obligations tendered by them for the purpose, or otherwise, in such form and in such amount and at such interest or discount rates as the corporation may approve. Each such loan may be made for a period not exceeding three years, and the corporation may from time to time extend the time of payment of any such loan, through renewal, substitution of new obligations, or otherwise, but the time for such payment shall not be extended beyond five years from the date upon which such loan was made originally.

This bill would empower the corporation to issue notes, debentures, or bonds in amounts not over three times its subscribed capital.

Some objections already have been made to the bill on the grounds of its failure to specify the rate of interest to be charged and the very broad powers granted the corporation directors. It seems quite certain, however, that some form of measure will become law in time to provide needed support to the credit of all industries and financial institutions early in this year.

Report of the Chief of the Biological Survey

THE work of the Biological Survey, which is a bureau in the United States Department of Agriculture, has to do with all forms of wild life. A great deal of research work continually is being done in regard to the food habits of all classes of birds and small animals, migrations and health of game birds. Experiments in fur production, especially with foxes, are under way. The Survey also administers several federal laws regarding hunting of birds and the creation of refuges for wild ducks and other species of game. Movements and diseases of elk and reindeer are also studied.

On the economic side most of the Survey's work is in the study and control of rodents, coyotes, and wolves.

The Chief of the Biological Survey, Mr. Paul G. Redington, made this statement as to policy in his annual report for the year ended June 30, 1931:

A Policy of Control, Not Extermination

It can not be too strongly emphasized that the established policy of the Biological Survey with regard to injurious species of wild animals has been and will continue to be one of control rather than of extermination.

The Bureau of Biological Survey, that branch of the Federal Government primarily concerned with wild-life conservation, takes the position that it is well for the conservation of the wild life of the country that leadership in the control of injurious species has been delegated to an organization concerned with the welfare of the various forms, charged with the enforcement of wild-life conservation laws and the administration of wild-life refuges, and recognizing the desirability of preserving representatives of all forms of wild life on suitable areas.

It is only by control measures properly directed, however, that the burdensome losses suffered by farmers and stock raisers can be reduced and the beneficial and interesting forms of wild life protected from their natural enemies when these become overabundant. Though measures in line with this policy may mean local extirpation of harmful forms in some cases, it will not result in the eradication of any species.

In connection with operations for the control of coyotes and rodents, the report said:

Cooperative Funds and Organization

Federal and cooperative funds available during the year permitted organized field work in the control of predatory animals and injurious rodents in 40 states. Federal funds available totaled \$607,360, of which \$35,752 was used in research in control methods; \$340,110 in the control of predatory animals; and \$231,498 in the control of rodents. The states provided \$470,779 for use in cooperative control operations, while counties, livestock associations, and individuals spent \$404,062 for poison and labor in campaigns conducted under the supervision of bureau field leaders, and for poison prepared by the bureau. This was exclusive of the rodent work in California, where counties and individuals spent \$507,914 for rodent-control purposes, the work on private lands being largely supervised by state and county officials. Thus the total advanced by cooperators for conducting organized control campaigns was \$1,382,755; consequently their contributions exceeded the funds appropriated from the National Treasury in the proportion of more than 2 to 1.

The Federal Government materially increased the effectiveness of its control operations through an emergency appropriation made late in the year under the provisions of the construction and employment program. The \$202,645 appropriated under this measure provided 36,056 days of labor in the aggregate for predatory-animal and rodent control. Thus the bureau was enabled to prosecute additional rodent-control work on the public domain for a brief period and to extend further cooperation in the way of supervision to private landowners. The emergency appropriation also enabled the bureau to employ additional hunters during the spring months, when effective work could be done against predatory animals on lambing ranges and other areas where at this season they are particularly destructive.

State appropriations for predatory-animal and rodent control work in cooperation with the bureau during the coming biennium were made (in amounts equal to former appropriations) in 16 states. These states are Washington, Oregon, California, Nevada, Utah, Arizona, New Mexico, Colorado, Wyoming, Idaho, Montana, Oklahoma, Arkansas, Texas, Wisconsin and Michigan. Cooperative funds in Alaska were withheld by recent action of the Territorial legislature, because of the economic situation. In Nevada a slight increase in funds over the past biennium became available on January 1. New legislation appropriating \$10,000 a year was passed in Missouri, and the bureau has been requested to enter into cooperative wolf control there. In view of the financial situation through-

out the country the appropriations that were made speak well for the effectiveness of the cooperative control program and evidence the satisfaction of the states with the leadership of the Biological Survey in the work. * * *

Ten-Year Control Program Approved

The success in pest-control service thus far attained with limited resources has indicated that even greater efficiency might be expected under a definite control program over a long period. Congress has given this matter consideration and, as a proviso to the act making appropriations for the department for the fiscal year 1929, called for an investigation of the feasibility of such a program. The investigation was made and a report thereon recommending a cooperative program to cover a 10-year period was submitted to the Seventieth Congress.

Bills were introduced in both Houses of the Seventy-first Congress to authorize the institution of the 10-year plan of control. The proposal was approved by the Bureau of the Budget, and hearings were held by the Senate Committee on Agriculture and Forestry and the House Committee on Agriculture. Strong indorsement of the measure was given by many national, state, and local organizations. These included state legislatures; state agricultural commissions; farm bureau federations; cattle, sheep, goat, and poultry raisers' associations; horticultural societies; sportsmen's associations; state fish, game, and conservation departments; and chambers of commerce. Objection was presented by naturalists and others, individually and through their organizations, who feared general extermination of certain animals and opposed some of the control methods employed. The bill as passed by Congress, and approved by the President on March 2, 1931, authorizes appropriations not to exceed \$1,000,000 annually. The passage of this law after careful consideration and public hearings, at which ample opportunity was given for both the proponents and the opponents of the measure to express their views, should set at rest any reasonable doubt as to whether the control program deserves public approval.

The 10-year program contemplates cooperation between federal, state, and local agencies. With a view to avoiding duplication of work and insuring the best results from the efforts and funds expended, the bureau of Biological Survey will continue its cooperation with the Forest Service, the Indian Service, and the Office of Cooperative Extension Work; with extension service organizations, including colleges and county agricultural agents; and with state departments of agriculture, game commissions, county commissioners, and various agricultural, horticultural, and livestock organizations. * * *

In spite of the predatory-animal control work that has been done, largely in the

western states, much still remains to be done before the losses of livestock, poultry, and game can be reduced to a reasonable minimum. Several instances have been noted during the past year illustrating how predatory animals may concentrate in sections where they are not molested and food is plentiful. One Biological Survey hunter working in the State of Washington took 176 coyotes, largely young from the dens, during the month of April in the Horse Heaven and White Bluffs-Hanford section; 22 wolves were taken during the year in an area less than 10 miles square in Creek County, Okla.; and 50 coyotes were taken from an area of approximately half a township in Nebraska, which includes a portion of the Niobrara Game Reservation maintained by the Biological Survey.

The Development of Game and Recreation Interests on National Forests

THE recent annual report of the Chief of the United States Forest Service includes a statement that in 1930 there was an increase of 9 per cent in the number of big game animals on national forest lands, which makes the total estimated number of big game animals on forest lands more than a million head.

The relation of the increase in game animals to grazing resources was discussed in the issue of the National Wool Grower for last May. In the June number of the Wool Grower there was also printed a reassuring statement from Forester Robert Y. Stuart in which he expressed the opinion that there was no necessary conflict between the interests of western stockmen and the policy being pursued in connection with the game resources and recreational uses of the forests.

In the later report referred to above, Major Stuart makes the following statement:

The annual report for 1929 contained a discussion of range stability and the effects of improved range management. During 1930 some question was raised as to whether the decline in numbers of livestock was not largely due to the efforts of the Forest Service to increase the number of big game animals, and to restrictions on livestock in the interest of recreation and better watershed and timber production. On the other

hand, some game enthusiasts attempted to show that national forest ranges were monopolized by the stockmen and that game interests were not being fully protected. The Forest Service has endeavored to maintain a balanced program which would accord all interests full consideration. The situation is one which demands calm consideration, study, development of all the facts, and the fair and harmonious working out of the problem in cooperation with all those affected. The stockman views with considerable alarm reported increases of the past 5-year period in big game animals, and the critical conditions which have been and are developing on certain national forests by reason of an over-population of game animals. He sees a danger of gradual curtailment of his valuable privilege, although at the same time he is sympathetic to the needs of wild life and resents the implication that he is responsible for its destruction.

When the facts are fully known it becomes evident that many of the assertions in regard to the damage to game by the presence of livestock are not only exaggerated but unsubstantiated. Much of the alleged damage is due to other causes than livestock, causes often unknown to those who criticize. That game animals do not increase more rapidly in certain localities is often due to inadequate winter range outside the national forests, illegal killing, predatory animals, disease, and parasites. From a broad point of view it is believed there is no occasion for alarm. It is true that big game animals have increased on national forests. It is equally true that restrictions have been made on the grazing of livestock in the interests of game; but no serious actual reduction in numbers of

livestock has been made. Areas have been reserved for game purposes, but these reservations have been made gradually, and their loss to livestock interests has been fully compensated for by improved range conditions and management on the rest of their allotments.

Of the total net area of over 132,000,000 acres of national forest land in the western states over 86,000,000 acres, or about 65 per cent is usable range. Of the usable range over 82,000,000 acres, or about 95 per cent, is actually used by domestic livestock. Game animals occupy over 45,000,000 acres of land considered unusable by domestic stock but constituting excellent game range, over 2,500,000 acres closed to use by domestic stock, and over 2,000,000 acres reserved from grazing for other uses. Thus there are nearly 50,000,000 acres of good game range on which domestic livestock does not graze. In addition much range is occupied by both game and domestic livestock, the capacity of the range being determined by the amount of feed available for each class of animals. On the 288 game refuges within the national forests domestic livestock has been restricted to the equivalent of the carrying capacity of 2,000,000 acres. * * *

There has been a reduction in stock months during the last five years of approximately 5.6 per cent. Of this reduction, 28 per cent was in numbers of stock and 57 per cent through shortening the grazing season to protect the productivity of the range. The remaining 15 per cent of the reduction resulted from forfeitures of privileges and the use of surplus range so secured for further protection purposes. It may be, of course, that in some of these cases reductions were made in the interest of both game and livestock. It is certain that the drouth period is chiefly responsible and that outright reductions in the interest of game have been inconsequential.

It should be understood that game was almost exterminated on many areas when the national forests were created. The increase in numbers was most gradual, and for many years was hardly noticeable. Systematic protection and the reduction of predatory animals have created a more favorable environment, so that during recent years pronounced increases have occurred. While these increases have occurred on ranges occupied by both domestic stock and game animals, a large part of the increase is on ranges having no domestic stock and, until comparatively recent years, only a few game animals. There are still areas where a large number of game animals and birds might be produced without interference with domestic livestock.

Forests for Recreation

The inspirational and recreational values of the national forests grow in popularity with each passing year, particularly as new regions are made accessible by federal and

state highway construction. Since 1916 the number of visitors has increased more than tenfold. For the calendar year 1930 the estimated number of visitors was 31,904,452, a slight increase from the preceding year. It included 326,826 special-use permittees and guests, 1,330,610 hotel and resort guests, 1,980,736 campers, 3,272,680 picnickers, and 24,993,600 transient motorists.

Much of this use is by local residents, but a substantial part is by people from remote sections. Motor cars from every state and territory in the Union are to be found on the national forest roads and camp grounds. The resulting business is of great importance to local commercial enterprises, so that the recreational potentialities of the national forests now have a substantial significance for their regions.

Without reasonably adequate provision for the maintenance of sanitary conditions and the prevention of fires this enormous influx of people would create serious hazards to public health and property. The establishment of public camp grounds minimizes these hazards. The provision of 156 additional improved camp grounds during the year increased the total to 1,731, but many of them are only partially equipped with the facilities required to bring them up to proper standards of safety and convenience. The total cost of this system of national forest public camp grounds to December 31, 1930, was \$383,740, of which \$52,601 was contributed by public and private cooperators in cash, materials, and labor.

Western Forest Official Recognizes Game Problem

MR. O. A. OLSEN, in charge of the United States Forest Service, recently made the following statement in an address before the Lions Club at Ogden, Utah:

Utah's next legislature will be asked by wild game experts to adopt a bill providing for some method of deer population control. As deer are not migratory animals, there is now an overcrowded condition in three southern Utah regions, especially in the Beaver section. Only through some legalized hunting can this deer population be reduced so that the ranges are not damaged.

Overproduction is more than underproduction. With overproduction you lose both the deer and the range; the other way, you lose the deer.

There are now about 60,000 deer in Utah and about 3,500 elk, with a very few mountain sheep and goats. Utah can support a large game population, but this number should be properly placed so as to provide sufficient forage without range damage.

Court Sustains Secretary of Agriculture on Boycott Decision

THE action of the Secretary of Agriculture in suspending from business a number of commission firms operating in the East St. Louis stockyards was sustained in a decision entered December 14, in the Federal District Court of Eastern Illinois.

On February 24, 1931, the Secretary ordered the suspension from business of a number of firms unless they discontinued boycotting the Producers Commission Company and the National Order Buying Company, both affiliated with the National Livestock Marketing Association, which enjoys the support of the Federal Farm Board.

The commission houses included in the February order refused to buy from or sell to either of the above branches of the cooperative association. When their suspension from business because of that action was ordered under the powers granted by the Act of 1921 to the Secretary of Agriculture a temporary injunction was granted by the U. S. District Court for Eastern Illinois.

In the hearings upon the application for a permanent injunction it was argued for defendants that the Agricultural Market Act of 1921 was unconstitutional and that they therefore could not be suspended for boycott of a concern created and operated under the provisions of that act. It was also argued that the Packers and Stockyards Act was unconstitutional "because of uncertainty in the definitions of 'unfair, unjust, unreasonable and discriminatory practices'." The court refused to recognize either of these claims and refused to restrain the order of February 24 issued by the Secretary of Agriculture against the firms boycotting the cooperative agencies.

Fattening Lambs on Potatoes

By E. F. RINEHART

IN years of a surplus, and low prices much use is made of potatoes as a feed for cattle, sheep and swine. During the winter of 1928-29, the Idaho Station fed second grade and cull potatoes to two double-deck cars of lambs. They were divided into four lots of 125 head each, of which three decks were fed potatoes. The other deck was fed the same hay and barley ration without supplementary feed. The lambs were a good, smooth, uniform lot of white-faced, quarter-blood breeding, an even sort from a band of 1,500 wether lambs.

Lot I was fed on hay and barley, a ration accepted as standard in Idaho, and fed to one pen of lambs each year. During the eighty-day feeding period this lot gained 25.6 pounds per lamb, an average daily gain of .32 pounds. The average daily ration was 2.71 pounds of hay, and 1.13 pounds of barley. Twenty-five per cent of the hay was wasted. Each 100 pounds gain required 847 pounds of hay and 352 pounds of barley. At \$8.00 per ton for alfalfa hay and \$1.00 per hundredweight for the grain, the feed cost of each 100 pounds gain was \$6.91.

Lot II, fed on alfalfa hay, barley and one pound of potatoes per day, was an attractive pen of lambs. The daily ration consisted of 2.65 pounds of hay, 1.10 pounds of barley and .92 pounds of raw potatoes. The waste hay was 24.7 per cent. Feed requirements for each 100 pounds gain were 772 pounds of hay, 320 pounds of barley and 267 pounds of raw potatoes. Fed in a light amount, one ton of potatoes replaced 562 pounds of hay and 240 pounds of barley. At current prices of hay and grain, previously mentioned, the feeding value of one ton of potatoes was \$4.65. The addition of potatoes to the ration of hay and barley improved the thrift and finish, each lamb making an average daily gain of .34 pounds.

Lot III was given a full feed of

barley and hay and all the potatoes they would eat. This was not as large a quantity as had been anticipated, averaging 1.63 pounds per head daily, in addition to 2.59

wasted 29.8 per cent of their hay. Each 100 pounds gain required 785 pounds of hay, 342 pounds of barley and 294 pounds of cooked potatoes. Cooking the potatoes did not prove profitable. The feed replacement of each ton of cooked potatoes was 422 pounds of hay and 68 pounds of barley, giving a value



Idaho Lambs at the Close of the Potato Feeding Experiment at the Idaho Station



pounds of hay and 1.09 pounds of barley. Of this feed, 25 per cent of the hay was wasted. Feed requirements for 100 pounds gain were 750 pounds of hay, 315 pounds of barley and 473 pounds of raw potatoes.

This was the best gaining lot of lambs in the experiment. Each lamb made an average daily gain of .36 pounds compared with .34 pounds in Lot II, and .32 pounds in Lot I. Fed in this way, one ton of potatoes replaced 402 pounds of hay and 156 pounds of barley. This gave them a replacement value of \$3.17.

Lot IV was fed like Lot II, with the exception that the potatoes were cooked. The average daily ration was 2.52 pounds of hay, 1.09 pounds of barley and .94 pounds of cooked potatoes. The lambs gained .33 pounds per head per day. They

of \$2.37 per ton, compared with a feeding value of \$4.65 per ton when a similar amount of potatoes were fed raw. The extra cost of cooking the potatoes was \$3.40 per ton, making a loss of \$1.03 a ton.

At the close of the experiment the lambs were shipped and sold on the San Francisco market. All were pronounced well finished, with Lot III having the highest finish, followed in order by Lot II, Lot IV and Lot I.

This same year a similar test was run on feeding potatoes to steers. In the cattle feeding test, potatoes were checked with hay and grain, and with corn silage. One lot was fed an average daily ration of 21.8 pounds of alfalfa hay and 7.1 pounds of barley; a second lot 15.7 pounds of hay, 7.1 pounds of barley and 18.6 pounds of corn silage;

a third lot 17.8 pounds of hay, 7.1 pounds of barley and 15 pounds of potatoes. The gains of all were practically the same, being an average of 1.92 pounds for the hay and barley; 1.93 pounds for the silage, and 1.95 pounds for the potato lot.

Compared with hay and grain, one ton of potatoes replaced 574 pounds of hay and 10 pounds of barley, a feeding value of \$2.40. An additional advantage was the elimination of the danger of bloating on hay and barley. The comparison of cull potatoes with corn silage gave almost identical results. The addition of succulence improved the appearance of the steers. Counting potatoes and corn silage to have the same value of \$5.00 per ton, the feed cost per 100 pounds gain was \$9.25 for the potato-fed lot and \$9.37 for the silage lot. Both the potato and silage-fed steers out-sold and out-dressed the hay and grain steers, each dressing 62 per cent against 60 per cent for the hay and grain cattle.

California President is for Service and Organization

I WANT to express my appreciation of your message of congratulation and best wishes expressed by both you and your association.

I know that your problems of 1931 have been many and I want to congratulate you on the progress you have made which I think is attributable to the aggressive attitude taken by your organization.

I believe your position today is far ahead of what it would have been had you continued on the usual basis without any new organization or service undertakings. I received the advertising folio covering the Omaha Sales Campaign in November. The results of this campaign are indeed encouraging.

I am looking forward to attending the meeting of your executive committee on January 10, 1932.

Wishing you a Happy New Year I am,

Yours very truly,
W. H. Baber, President.

Test of Corn vs. Cake for Range Ewes

AN age old controversy among stockmen has been the relative value of corn and cottonseed cake for wintering range sheep.

Evidently the answer depends on the nutritive value of plants such as the dry grasses, sages, brush and weeds that make up the winter range forage.

In a project just launched, the Utah State Agricultural College will make a detailed study of the effect of feeding these standard concentrates to sheep wintered on the desert range. The test will be conducted in cooperation with Howells Livestock, Inc., at Troutcreek, Utah. In the experiment this winter three bands of approximately 2500 sheep each will be wintered on comparable range. One band will receive no concentrate, another will receive one-fourth pound of cottonseed cake per head daily, and the other will be fed one-fourth pound of corn per head daily.

Representative groups of sheep in all three bands will be weighed and tagged, then grazed and fed with their respective bands until spring, when individual weights of sheep and fleece as well as individual birth weights and measurements of lambs will be secured. In order to make a detailed study of the winter forage plants and their relative importance in winter maintenance rations for some three million sheep in Utah a trained investigator from the Experiment Station will spend the winter on the range with the sheep and will collect samples of all forage plants eaten by the sheep.

These forage samples will later be identified and analyzed in the study to determine the feed nutrients they contain and the concentrate best suited for use with them.

The need for more information concerning range forage and suitable supplements has been emphasized by repeated inquiries from stockmen this fall. Methods of feeding and management in the

experiment will be under the direction of the Animal Husbandry Section. Range reconnaissance and identification of plants will be supervised by the Range Management Section and chemical studies will be made by the Chemistry Section.

Study of Wild Life on Public Domain

FURTHER government activities in the conservation and rehabilitation of wild life are promoted in a bill which passed the Senate on December 18. Among the provisions of the bill (S. 263) are these:

That the Secretary of Agriculture and the Secretary of Commerce are authorized to provide expert assistance to and to cooperate with Federal, state, and other agencies in the rearing, stocking, and increasing the supply of game and fur-bearing animals and fish, in combating diseases, and in developing a nation-wide program of wild-life conservation and habilitation. * * *

The Bureau of Biological Survey and the Bureau of Fisheries are hereby authorized to make surveys of the wild-life resources of the public domain, or of any lands owned or leased by the government, to conduct such investigations as may be necessary for the development of a program for the maintenance of an adequate supply of wild life in these areas, to establish thereon game farms and fish-cultural stations commensurate with the need for replenishing the supply of game and fur-bearing animals and fish, and, in cooperation with the National Park Service, the Forest Service, or other Federal Agencies, the State agencies, to coordinate and establish adequate measures for wild-life control on such game farms and fish-cultural stations: And provided further, That no such game farm shall hereafter be established in any state without the consent of the legislature of that state.

In carrying out the provisions of this Act the Federal agencies charged with its enforcement may cooperate with other Federal agencies and with states, counties, municipalities, individuals, and public and private agencies, organizations, and institutions, and may accept donations of lands, funds, and other aids to the development of the program authorized in this Act: Provided, however, That no such donations of land shall be accepted without consent of the legislature of the state in which such land may be situated: Provided, That no authority is given in this bill for setting up any additional bureau or division in any department or commission, and shall not authorize any additional appropriation for carrying out its purposes.

WOOL MARKETS

Reported and Discussed by

The National Wool Marketing Corporation

National Wool Corporation Elects Directors and Officers

REPRESENTATIVES of 28 wool marketing associations affiliated with the National Wool Marketing Corporation met in Chicago on December 7 and 8 for the transaction of annual and new business of the Corporation. These 28 organizations hold and vote the stock of the National Corporation.

At meetings of the outgoing executive committee and board of directors held in advance of the stockholders' gathering, changes in the by-laws of the Corporation were discussed and recommended to the stockholders' meeting in which they later were adopted. These changes were:

1. Each member association in the National Wool Marketing Corporation shall be entitled to have a representative upon the Board of Directors of that Corporation who shall have one vote and, in addition, one vote for each 500,000 pounds of wool represented and sold through the National Corporation.

2. Salaried officers or employees of member associations shall not be eligible to act as national directors. This was adopted by a divided vote and is to become effective on March 1, 1932.

The list of newly elected directors of the National, representing the various member associations, is as follows:

NAME OF ASSOCIATION	HEADQUARTERS	NATIONAL DIRECTOR
American Mohair Producers Cooperative Marketing Corporation	Uvalde, Texas	Mr. Hall
Arizona Wool Growers Association	Phoenix, Ariz.	A. A. Johns
California Wool Marketing Association	Red Bluff, Calif.	F. A. Ellenwood
Central Wool Marketing Association	Boston	Frank Lebus
Colorado Wool Marketing Association	Denver, Colo.	L. W. Clough
Colorado-New Mexico Wool Marketing Association	Durango, Colo.	E. Sargent
Eastern Idaho Wool Marketing Association	Pocatello, Idaho	A. H. Caine
Western Idaho Wool Marketing Association	Boise, Idaho	Worth S. Lee
Indiana Wool Growers Association	Indianapolis, Ind.	T. I. Ferris
Iowa Sheep and Wool Growers Association	Ferguson, Iowa	J. L. Bane
United Wool Growers Association, Inc.	Baltimore, Md.	W. H. Ferguson
Michigan Cooperative Wool Marketing Association	Lansing, Mich.	W. W. Billings
Minnesota Cooperative Wool Growers Association	Wabasha, Minn.	R. E. Jones
Midwest Wool Marketing Association	Kansas City, Mo.	Dr. O. O. Wolf
Montana Wool Cooperative Marketing Association	Helena, Mont.	Roy Clary
Nevada Wool Marketing Association	Elko, Nevada	C. A. Sewell
New Mexico Cooperative Wool Marketing Association	Albuquerque, N. M.	F. W. Lee
North Dakota Cooperative Wool Marketing Association	Fargo, N. D.	R. E. Strutz
Oregon-Washington Wool Marketing Association	Yakima, Wash.	J. W. Hoech
Pacific Cooperative Wool Growers	Portland, Ore.	R. A. Ward
Cooperative Wool Growers of South Dakota	Brookings, S. D.	J. H. Lemmon
Lone Star Wool-Mohair Cooperative Association	San Angelo, Texas	Sol Mayer
Mid-Texas Wool and Mohair Marketing Corporation	Menard, Texas	C. A. Martin
Sonora Wool and Mohair Marketing Corporation	Sonora, Texas	L. W. Elliott
Southwest Texas Wool and Mohair Marketing Corporation	Del Rio, Texas	Horace Fawcett
Utah Wool Marketing Association	Salt Lake City, Utah	J. A. Hooper
Wisconsin Cooperative Wool Growers Association	Portage, Wis.	R. E. Richards
Wyoming Wool Cooperative Marketing Association	McKinley, Wyo.	C. M. Wilson

The members of the executive committee went from Chicago to Washington, D. C., for further conferences with the Farm Board upon affairs of the Corporation and plans for operations in 1932.

The directors elected the following officers:

President—Sol Mayer, San Angelo, Texas.

Vice President—R. F. Clary, Great Falls, Mont.

General Manager—J. B. Wilson, Boston.

Secretary—C. H. Center, Boston.

Treasurer—D. E. Judd, Boston.

Executive Committee—The President and Vice President, A. A. Johns (Arizona), J. W. Hoech (Oregon), J. H. Lemmon (South Dakota), L. W. Elliott (Texas), and Frank Lebus (Kentucky).

The Corporation's Washington Office

GROWER members of the National Wool Marketing Corporation and all other wool growers are invited to make use of the cooperative's Washington office and research department managed by Frank E. Fitzpatrick at 330 Munsey building.

All associations, as well as each individual, are invited to consider this office as their own. Any information desired from governmental departments will be obtained upon request. Hotel reservations may be secured by writing to the National at the Washington office.

Wool growers or their friends who consider visiting the national capital can have appointments arranged with any legislators and any other service is available.

The Wool Market

Events of 1931 — Prospects for 1932

END-OF-THE-YEAR quietness prevails in the world wool markets, although a fairly strong tone exists in favor of holders of wool. At this time of the year, when merchants, mills and buyers are busy taking inventories, and winding up their year's business, little activity occurs in the wool market.

Sales of wool have been light during the last two weeks of December, yet a better demand seems to be assured after the turn of the year. Even with the slight easing of prices apparent during the closing days of 1931, the National is not worried over market trends. As the cooperative pointed out two months ago, the available supply of domestic wool is not more than enough to meet the needs of buyers before the new clip arrives. This should indicate that some wool probably will need to be imported. This factor alone, due to the tariff, will tend to keep price levels even. Only demoralization of foreign exchange which might allow importing at unheard of sacrifices could effect the domestic supply. The latter development is unlikely, since foreign prices on wool have advanced in most cases sufficient to absorb the depreciation in exchange.

Although some holders of wool have made slight price concessions, the National has rejected offers below market values and have urged independent holders of wool not to undersell the market, maintaining that the price should remain firm on account of the smaller available supply and the better demand before shearing time and arrival of the new clip. This movement by the growers' cooperative has done much to prevent weakening of an uncertain market during unsettled times.

One rather peculiar situation has arisen in the New York goods market, where consumption of finished fabrics plays a vital part in how much cloth the mills produce and how much wool they buy. Clothiers have been engaged in intense competition in efforts to gain new business. As a consequence and due, partly, to mild winter weather in big buying centers, sales of wool goods have come in spurts and orders of supplies have been rather varied. This has made the mills engage in hand-to-mouth buying of raw wool, with the hope that the price of the raw material would decline. This factor accounts for the ups and downs of sales reports on raw wools for the past several months. With improvement after the first of the year in general markets, a more orderly buying system is anticipated.

Although 1931 will go down in history as one of the worst depression periods in the history of the world, wool held its own. In contrast, nearly every other

commodity has suffered huge losses. The past year has been difficult for marketing all commodities. Nevertheless, consumption of wool increased 63 million pounds the first ten months of 1931 over the same period in 1930. Wool made long strides in coming back to its formerly undisputed leadership of all textiles. Wool held the spotlight of fashion's edict and should continue to be in strong demand during 1932 and the future, since all of the style advances indicate a strong trend to cling to woolens and worsteds.

World consumption of wool in 1931, has been estimated at 20 per cent greater than in 1930, while world production of 2,669,000,000 pounds was only four per cent greater than a year ago. In the United States for 1931, estimated production of 432,700,000 pounds was 28,000,000 pounds more than in 1930. Because of unsatisfactory returns in the past year, it is believed production will be less in 1932.

With these strong factors in favor of wool, it is natural that prices should have shown some improvement. Better values for wool would have occurred during a normal year, but the 1931 depression worked unfavorably in many ways against wool as well as against every other industry. The inability of many mills to operate without losses hampered buying of raw wool. The great Lawrence strike curtailed production during the busiest months of the fall. Small dealers of wool who feared unsettled conditions, sold wool at less than market levels and made it difficult for large holders with confidence and vision to keep the market tone steady. The decline of the British pound sterling kept things uncertain. Had the drop been great, importers might have been able to bring in wool cheaper than the current levels in the United States.

The statistical position of wool should continue strong in 1932 in view of the present outlook, experts believe. One estimate predicts that United States production will decrease 25,000,000 pounds in 1932. The failure of the United States to buy in foreign markets will help keep wool stronger during the coming year, since no unusually large surplus exists in other world markets.

In retrospect on 1931 activities of wool, growers should not forget National Wool Week and its benefits. The "Wish It With Wool" movement designated to stimulate purchase of wool gifts for Christmas also brought much good will and greater advertisement to wool. Besides accounting for heavier sales and therefore more consumption of woolens and worsteds, National Wool week and "Wish It With Wool" promotion brought producer and manufacturer, retailer and

wholesaler into one unit. This unit worked harmoniously for the common good of the industry for the first time in textile history.

The National took the lead in wool week promotion and worked closely in guiding the activities of the national-wide advertising of wool. Through the growers' cooperatives, wool and its uses and its values were given the best advertising in history of the age-old fabric. The results of the growers' efforts to fur-

ther their own industry and to work with all connected with the industry in another concrete illustration of the value of working together.

With many of the unforeseen difficulties of 1931 passed and another year of valuable experience gained in the cooperative marketing of wool to the best advantages of the growers, the National looks forward to greater success in the future and to sound establishment of our orderly marketing policy.

Lamb Feeders of North Dakota Make Demonstration Tours

FIVE million pounds of lamb are being manufactured this year in North Dakota and Minnesota feed lots as one of the results of a rapidly developing new industry which involves the feeding of lambs from central Oregon and Montana ranges before being marketed.

A series of demonstration tours in the two states has just been completed. Thirty-eight farms, on which either lambs or cattle are being fed in LaMoure, Richland and Cass counties in North Dakota and Clay County in Minnesota, were visited by farmers, livestock commission men, Montana lamb producers, packer buyers and railroad officials. Sponsored by the agricultural development department of the Northern Pacific Railway, these tours were conducted with the cooperation of county agents and community and civic clubs. According to the sponsors, the tours demonstrated that the shift from "wheat to meat" taking place in the Red River Valley of North Dakota and Minnesota is a definite, organized and economically sound movement with sufficient momentum accumulated to establish it permanently.

The tours disclosed to the farm visitors that 200,000 range lambs are being fed by approximately 300 farmers. Last year in the same area 100,000 lambs were fed, and the previous year only a few hundred

were imported for feeding. By the end of the present feeding period 5,000,000 pounds of lamb, which

represents the amount of gain in weight which will be put on, will have been manufactured in North



A large number of farmers and other business men have just completed a closeup inspection of lamb feeding in Minnesota and North Dakota on a series of four separate tours. The picture shows one of the groups of farmers and a typical flock of feeder sheep.

Dakota and Minnesota feed lots. Forty million pounds of grain, together with 20,000,000 pounds of roughage, will have been used to produce that volume of meat.

Authorities who have made a study of this new industry declare that lamb and cattle feeding have become permanent in this territory.

Continuous cropping of land in wheat for 50 years has made imperative the need for fertilizer, legumes and cultivated crops to restore fertility, improve the physical condition of the soil and reduce weed infestation.

According to the tourists, much improvement has been made in shelter, water arrangements and other equipment. Where much makeshift and temporary equipment was used last year, most feeders have provided sheds, fences, feed bunks and watering troughs of new and permanent design. The tourists learned that the practice of turning lambs into cornfields to harvest their own feed has been much more common this fall than last and many operators have had exceptionally large and cheap gains as a result.

One of the conclusions reached by the tourists was that the Red River Valley lamb feeding program will always be identified chiefly by small, individual operators feeding from two or three to six or eight cars of lambs a year, the volume determined by the amount of feed available because practically no grains or roughage are purchased. Contact with the feeders of this territory disclosed that they are taking a long time view of their enterprise and, irrespective of prices received this year, they plan to continue next season, and, in addition, many others are preparing thus early to feed next fall.

Of the lambs now on the North Dakota and Minnesota feed lots which came from central Oregon and Montana ranges, almost half were purchased outright and the others are on a contract basis, the farmer to receive a guaranteed

amount for each pound of gain put on.

The parties who made the tours said that not only are the people of this area in the northwest becoming feeders of lambs, but they also are becoming lamb consumers and are ardent advocates of meat in the diet. In connection with each of the tours, a banquet was served with lamb in some form as the basis of the menu.

Cullen Demonstrates Lamb Before North Dakota-Minnesota Feeders

M. O. CULLEN, lamb cutting specialist of the National Livestock and Meat Board, attended a number of the meetings recently held in connection with the demonstration tours of the new lamb feeding sections of North Dakota and Minnesota.

The lamb feeders especially were greatly interested in this evidence of the work being done by other branches of the sheep industry to help develop the outlet for their product. After the meetings under the supervision of the Northern Pacific, Mr. Cullen continued in North Dakota for a further series of demonstrations in the feeding territories which had been arranged for by the North Dakota Agricultural College.

Mr. Haw, agricultural agent for the Northern Pacific Railway, writes to the Wool Grower as follows regarding some phases of the meetings:

I want to comment on an angle of this work which would be of interest to you; that is, that we had with us on these tours from fifteen to eighteen representatives of the South St. Paul and Chicago livestock interests. Swift and Company and Armour and Company each had a man with us, and there were also representatives from several of the leading commission firms, the stock yards company, the Exchange, and from the agricultural papers and the dailies. Mr. Cullen told how the National Live Stock and Meat Board is financed and what its purposes were, and I am sure he gained a good deal of support for the work that is being done.

Mr. Haw is to appear on the program of the National Wool Growers' Convention this month and will tell something about the lamb feeding developments in the spring wheat growing states.

To Enforce Wyoming Fabric Law

WYOMING wool growers are persistent in their efforts of labeling woollen goods to show their shoddy content as required under the state law enacted in 1925.

The following is from the December 9, issue of the Wyoming Wool Grower:

The State Department of Agriculture will immediately make a careful check of all stores handling woollen goods in the state. L. T. Oldroyd, commissioner of agriculture, and Kleber Hadsell of Rawlins, chairman of the wool committee of the Wyoming Wool Growers Association, recently agreed on a definite plan of action. Representatives of the department will inspect stores handling woollen goods to ascertain whether or not the truth-in-fabric law is being lived up to. All places of business offering woollen goods of any kind for sale are subject to this law.

Practically all clothing merchants in the state have been called on during the year at which time they were requested to obtain as much information as possible from the manufacturers regarding the virgin wool content of woollen goods offered for sale. Many of the manufacturers have been very willing to give this information and all local merchants were willing to cooperate in order to render service to the woollen industry of Wyoming. Wherever the merchant has tried to obtain the necessary information regarding the same the committee feels that he has tried to do his part and for the present time action will not be taken in such cases even though the goods offered for sale may not be properly labeled.

It is desired, however, according to Mr. Oldroyd, that merchants carefully label all material containing a high percentage of virgin wool. Until further notice is received it will not be necessary to label articles containing no virgin wool or less than 50 per cent virgin wool. Where the manufacturer refuses to give the information regarding the virgin wool content no marking is required at the present time.

Where merchants have been called upon previously and have failed to cooperate they will be called into a hearing and requested to give reasons for not attempting to carry out the truth-in-fabric law.

Wyoming University Students Help Themselves by Aiding Wool Industry

SOME months ago a project was inaugurated at the University of Wyoming which provides employment for needy students and at the same time affords an outlet for Wyoming-grown wool. The project, involving the manufacture and sale of virgin wool quilts and sleeping bags, is enjoying splendid success and a steady growth. The wool from which these articles are made is carded and scoured by men students under the direction of Dean J. A. Hill, wool specialist, and the assembling into comforters and bags is under the direction of Professor Elizabeth McKittrick of the home economics department.

President A. G. Crane of the University has taken an active interest in this project and has appeared at a number of state and national meetings in behalf of its advancement. Exhibits of the finished articles, and partly completed ones showing the process of manufacture, have been made at fairs, wool growers' meetings, community round-ups and state teachers' meetings during the fall and early winter months. It is believed that these exhibits arouse an interest not only in the specific articles displayed, but in the use of wool in general for clothing and household purposes.

Since the advent of the general financial stringency the problem of providing employment for students who would otherwise have to stay out of school is a serious one. Many universities and colleges are located in small cities where jobs off the campus are not plentiful. With the curtailment of college programs owing to reduced incomes it has become increasingly difficult to pay for labor done by students for the institutions themselves. At the University of Wyoming the problem has been attacked from an angle of developing arts and crafts, the sale of hand-made articles from which

will be provided a revolving fund for the purchase of more raw materials and student labor. The sleeping bag and quilt project is one of several successfully promoted by the Wyoming institution.

During the past school year half of the enrollment at the University of Wyoming earned an average of nearly \$300 each in jobs in the town of Laramie and on the campus. This average of about \$30.00 per school month per student is in itself, perhaps, no record. Another fact in connection, however, has been an important one in the institution's decision to continue helping needy students. The students who earned this sum also earned grades above the average for all students enrolled. They not only paid their own way, at least in part, but had scholastic records better than their fellow students who did not have to work.

Keeping students in college these days is also a distinct aid to the employment situation in local communities throughout the country. If these students had to return to

their homes many of them would replace men now employed there and others might become a burden on their respective communities. The Board of Trustees at Wyoming University has announced as a policy that no student now enrolled will have to leave college for want of work. The wool project has been an important factor in this decision.

The prices asked for the various wool products prepared by the students is included here.

Price List of Wool Products Made by Students of the University of Wyoming

1. A wool bat containing 2½ pounds 100 per cent Pure Virgin Wool, 72x90 inches, covered with cheese cloth, knotted every 4½ inches each way. Ready to be covered with any covering.....\$ 4.50
2. A 2½ pound wool comfort covered with figured cotton challis —no cheesecloth inside—knotted every 4½ inches each way, ready for use 6.00
3. Wool bat No. 1 covered with figured cotton challis, outside



Above, Carding Pure Virgin Wool and Sewing the Bat into a Quilt at the University of Wyoming. These Students are Earning Part of their College Education this Way. Below, a Virgin Wool Sleeping Bag Made and Sold by Wyoming University Students.

cover knotted about 9 inches each way. This comfort is ready for use 8.00

4. Wool bat No. 1 covered with best quality sateen or lingette in plain colors or figured material, outside cover knotted about 9 inches each way. This comfort is ready to use 11.00

5. Sleeping bag 90x90 inches when flat, covered on outside with heavy army khaki or waterproofed with drill. Inside of bag is heavy canton flannel or part wool plaid. Fastened across bottom and upside with Lift the Dot fasteners—six inch lap allowed.

No chance to get cold. Inside contains six pounds 100 per cent Pure Virgin Wool made into a comfort covered with cotton challis completely finished and tied every 4½ inches each way which can be removed and used separately with little difficulty..... 25.00 to 27.50

Samples of coverings will be sent on request. All comforts are 72x90 inches (6 inches longer than commercially made ones.)

Orders taken for special sizes and weights. All wool used is 100 per cent Pure Virgin Wool carded by students and made into the finished products by students.

All prices are F.O.B. Laramie, Wyoming.

Lamb Feeding Situation, December 1, 1931

(Report by U. S. Department of Agriculture)

DEVELOPMENTS to the end of November indicate a considerable increase in the total number of lambs on feed for market on December 1 this year over last. The shipments of feeder lambs into the corn belt states, inspected through markets in November, were relatively large, being over 20 per cent above the shipments in November, 1930, and the largest for the month since 1922.

Total shipments inspected through markets into the eleven corn belt states for the five months, July to November, inclusive, were about 13 per cent larger this year than last and the largest for the period since 1926. While shipments into the states east of the Mississippi were larger this year than last, they were below the average of the preceding five years. Shipments into the states west of the river were the largest in twelve years. In addition to this increase in shipments from markets there was also a large increase over last year in the direct shipments from the range states into many of these states. While marketings of fed lambs were larger in November this year than last, this increase was not sufficient to offset the larger number of feeder lambs shipped in. Reports from commercial feeding yards located adjacent to middle western markets show that the total

number of lambs on feed in these yards on December 1 was materially larger than on December 1, 1930.

Shipments into northern Colorado, the Arkansas valley and the Scotts Bluff area in November were unusually large. At the end of October it hardly seemed probable that any of these areas would feed as many lambs as last year. Shipments into northern Colorado on December 1 were larger than the total to January 1 last year. Apparently there is a larger proportion of northern lambs in this area this year than last and fewer New Mexico lambs and many of these lambs are being fed on contract. The average weight of these northern lambs is probably five pounds or more lighter than last year. The heavy shipments into the Arkansas valley in November brought the total into that area by the end of the month above the total to the same date in 1930. Feeding in the San Luis valley and western slope will be much smaller this year than last but the total for the state will probably at least equal last year.

The situation in the Scotts Bluff area is similar to northern Colorado with more lambs shipped in by December 1 than were received to the end of December last year. With shipments from markets into other sections of Nebraska larger than last year, the total number fed this year

will exceed last. Other sections in Wyoming also had more lambs on feed December 1 this year than last and the number in Montana was also larger than last year.

Lamb feeding in Utah this year is much reduced from last year and many of the lambs on feed December 1 will only be short fed in the state and shipped elsewhere by the end of the month for finishing. Feeding in Idaho also is reported as being of considerably less volume than last year. Nevada, Washington and Oregon each had more lambs on feed December 1 than a year earlier with a particularly large increase in the Klamath Falls section in Oregon. Numbers in California were about the same as last year. Considerable numbers of New Mexico lambs are reported as being fed in that state where normally very few are fed. Shipments of Texas lambs both outside the state and to other sections within the state in October and November were larger and feeding within the state will be increased considerably this year.

Cottonseed Cake Increases Lamb Crop

RESULTS of flushing experiments with range sheep are in general accord with those already reported for farm flocks. At the United States Range Livestock Experiment Station, Miles City, Mont., 623 Rambouillet ewes flushed at breeding time by feeding one-half pound of cottonseed cake per head daily throughout the breeding season produced 120.9 lambs per 100 ewes, whereas the 612 ewes of the band which were not flushed yielded only 109.5 lambs per 100 ewes. The flushed ewes produced an average of 66.2 pounds of live lamb per ewe at weaning time as compared with 62.8 pounds by the unflushed ewes, an increase of 3.4 pounds of live lamb for the 21.83 pounds of cottonseed cake consumed per ewe.

(From the Report of the Bureau of Animal Industry.)

National Park Enlargements and Game Reserves

OPPPOSITION to enlargement of national parks and game reservations continues to develop. Two new cases have been reported, in Colorado and Oregon, and local interests, including stockmen are out in opposition to any action by Congress to confirm the ambitious plans of the Washington officials of the National Park Service.

In the case of the recent proposal in Colorado to transfer national forest lands in Grand County to the Rocky Mountain National Park, the questions of tying up mining and timber activities come up. Such would result from placing lands under the jurisdiction of the National Park Service. All of which adds interest to the apparently latent movement either to transfer the Forest Service to the Department of the Interior or to move the Park Service over to the Agricultural Department. It is the idea of this plan that the expensive rivalry of these two bureaus would be lessened if both came under the direction of the same member of the President's cabinet. Those familiar with the way some government bureaus are entrenched with sympathetic interests and organizations are not so confident that combined supervision would greatly change matters in this case, though the supposition that such a result would follow is a logical one. Secretaries in the national cabinet, having direction of government departments, come and go, but bureaucratic visions, schemes, and personnel are more permanent and steadfast.

In the new Colorado proposal 70,000 acres would be removed from utilization or development, including present grazing of 3,800 sheep and 300 cattle, along with timber operations essential to the town of Grand Lake, and considerable activity under mining claims.

Local residents insist that the recreational uses of the area can best be handled by the Forest Service.

Two hundred and thirty-five citizens have signed a statement of protest to the proposal.

In Lake County, Oregon, there is a movement to create a game reserve from a large body of land now being used for livestock grazing. The proposal as recently discussed in an open meeting of sportsmen and stockmen is explained in the statement of David T. Jones of Suntext, Oregon, which follows:

At a recent meeting of the Lakeview Chamber of Commerce, of which the writer was a guest, the subject under discussion was relative to the proposed Hart Mountain game reserve in southeastern Lake County, Oregon.

Mr. F. Zim Baldwin, reputed sponsor of the movement, was the principal speaker. Mr. Baldwin outlined in a very able manner the great advantage which Lake County would derive through conservation for the benefit of wild life of this scenic spot of Lake County in North Warner. Mr. Baldwin places special emphasis on the statement that if the stockmen, evidently from whom he expected some opposition, did not agree along the lines as outlined on a map of the area which was displayed at the banquet, that he, Mr. Baldwin, thought that the federal government, through pressure brought by appeals of lovers of wild life, would take the matter up and create a game reserve which probably would include a much larger area, making the matter a still more serious problem for stockmen.

Mr. W. V. Miller of the Commercial National Bank of Lakeview, who is regarded as a live wire among the sheepmen, voiced his opposition to any movement which would encroach upon or impair the carrying

capacity of the public domain at the present time, or at least until after the demise of Old Man Depression.

Mr. J. C. Flynn, a large sheep operator who is also interested in some of the financial institutions of Lake County, stated that between fifty and sixty thousand head of sheep were grazed on or near the proposed reserve, especially during the lambing season, but upon a close-up investigation, he, Mr. Flynn, thought that if there were some special guaranty that the proposed park would be confined to that particular area as outlined on Mr. Baldwin's map, it would not be such a serious menace to the sheep industry from which, as Mr. Flynn pointed out, Lake County derives her greatest revenue.

A general feeling of good fellowship prevailed at the banquet.

Dr. H. E. Kelty appointed a committee to investigate the matter and report its findings to the chamber at a future meeting.

Referring to Mr. Baldwin's contention that if the stockmen should offer any opposition to the proposed reserve, the federal government would take in a still larger area, probably the greater part of the public domain in eastern Lake County, it is the opinion of the writer that those statements should not be taken seriously.

The average man with sufficient ability to be in business, even if it be only the sheep business, should have intelligence enough to know that the public domain can not be withdrawn and included in a national park only by act of Congress or Presidential proclamation; the latter case only in an emergency. Is it possible that an emergency exists?

A certain spirit of fairness, however, should prevail in every struggle. For instance, if only the private holdings of those parties in Hart Mountain who are principally stockmen themselves are included and a few townships of public domain adjoining to which those stockmen have a recognized priority right, then, in the opinion of the writer, there should be no organized effort

on the part of sheepmen to defeat the proposed reserve.

If on the other hand, as some sheepmen contend, the proposed reserve reaches to the Harney County line on the east and close to the Nevada line on the south, this would affect indirectly the sheep business as a whole, as it would force several bands of sheep on to an already depressed market, thereby establishing a new low on sheep values.

To any effort at such legislation, as a member of the executive committee of the Oregon Wool Growers Association, I would say: Mr. Sheepman, don't be stampeded or browbeaten into the idea that even if you have a grievance you should keep mum, that your case is hopeless, or that you are at the mercy of any promoter.

Your grievance, if any, will be taken up with your state association and in turn with the National Wool Growers Association which has a large membership in the various states and will be properly presented at the proper time and place, not only to your representatives of the state of Oregon but also the representatives in Congress of the eleven western range states. And I might add that those honorable gentlemen are not favorably inclined to any freak legislation which might work a hardship on the stockmen whom they fully realize are in death grips with the prevailing economic depression.

Permit me also, Mr. Sheepman, to revive your memory and morale by reminding you of the fact that only a few years ago a movement to establish a game reserve in this same vicinity developed considerable momentum, being endorsed by different societies too numerous to mention. Sponsors of that movement, however, thought they had the matter so well in hand and, probably imbued by ulterior motives, became recklessly extravagant as to the area involved. Some of the family of friends of the movement journey to the National Capital to be present at the debut of this, their pet scheme of legislation, alas, only to witness

the harrowing spectacle of seeing it consigned to the waste basket.

Taking for granted that the conservationist does not aim to work a hardship on the stockmen, the writer has reason to believe that the sheepmen has no objection to the creation of a reserve in Hart Mountain proper and some of the adjoining public domain as mentioned above, but is strictly opposed to the idea of creating a reserve first and establishing the lines later, or after it diverts to the hands of ambitious office seekers.

This being the general attitude may I offer the following suggestion:

Call a meeting of your representative stockmen or any one interested, such meeting to conform to any date which might be satisfactory to the Biological Survey, who should send a representative. This representative should have some official authority to give a definite outline of the area involved.

At this round table conference after every one has placed his cards on the table with a spirit of give and take, there is no question in my mind but that the result will be satisfactory to every one concerned. This would tend to eliminate any petty jealousy or rivalry which might exist.

Hart Mountain is certainly one of the most favored locations for the propagation of wild life of any place in the West. Here Mother Nature overlooked no essential in completing her work of perfection. Here will be found those beautiful ravines, sheltered coulees, and bubbling cold springs which have stood the test of time and drouth. Here also is a combination of medium altitudes with luxuriant vegetation to suit the season, not overlooking its natural salt deposits at the base of the mountain on the shores of Flagstaff Lake.

Under these conditions this majestic old mountain is the ideal home, not only for the antelope and deer, but the mountain sheep, elk and buffalo, or any other animal which might thrive under those most favored natural conditions.

Suntex, Oregon David T. Jones

Farm Organization Opposes Giving Public Lands to States

THE National Grange is one of three large and influential farmer organizations, the other two being the American Farm Bureau Federation and the Farmers Union. Each maintains an office at Washington, D. C. A large part of the Grange membership is in the central and New England states, though it is strong in Idaho, and other western states.

In its sixty-fifth annual session, at Madison, Wis., in November, the Grange adopted a report upon land policy from which is taken the following:

The National Grange believes the forming of a comprehensive land policy should be started at once, looking toward the guidance of public action affecting farm lands and lands of other classifications.

* * *

The remnants of the public domain should not be turned over to the states but a comprehensive national land policy should include provisions for better consolidation of federal and state holdings, and for the administration of the public land, through reforestation or otherwise, so as to insure conservation and avoid improper use of this natural resource.

The use of federal, state, or other public money, except in connection with economically feasible projects already in existence, should be stopped so far as it contributes to the further development of land for agricultural purposes. A better use for reclamation funds would be to employ them in refunding indebtedness of irrigation and drainage districts needing assistance. In projects in which the main purposes of the use of public funds are for flood control, development of water power, or similar purposes, any subsidiary use of the water for bringing new farms into operation should be held in abeyance until there is evident need for additional agricultural land.

The forestry laws of the nation and states should be so broadened as to permit purchase of submarginal agricultural land whether suitable for forest purposes, recreational uses, or game preserves.

In the case of lands under federal control the administration of oil, mineral, or other subsurface uses should be separated from the administration of the agricultural, forestry, and other surface uses, the administration of the latter to be intrusted entirely to the United States Department of Agriculture, and so far as practicable to a single bureau charged with their conservation.

Values of Different Feeds for Range Ewes

By ROBERT F. MILLER, *Division of Animal Husbandry, College of Agriculture, Davis, Calif.*

An Address Delivered Before the California Wool Growers' Convention, November 5, 1931.

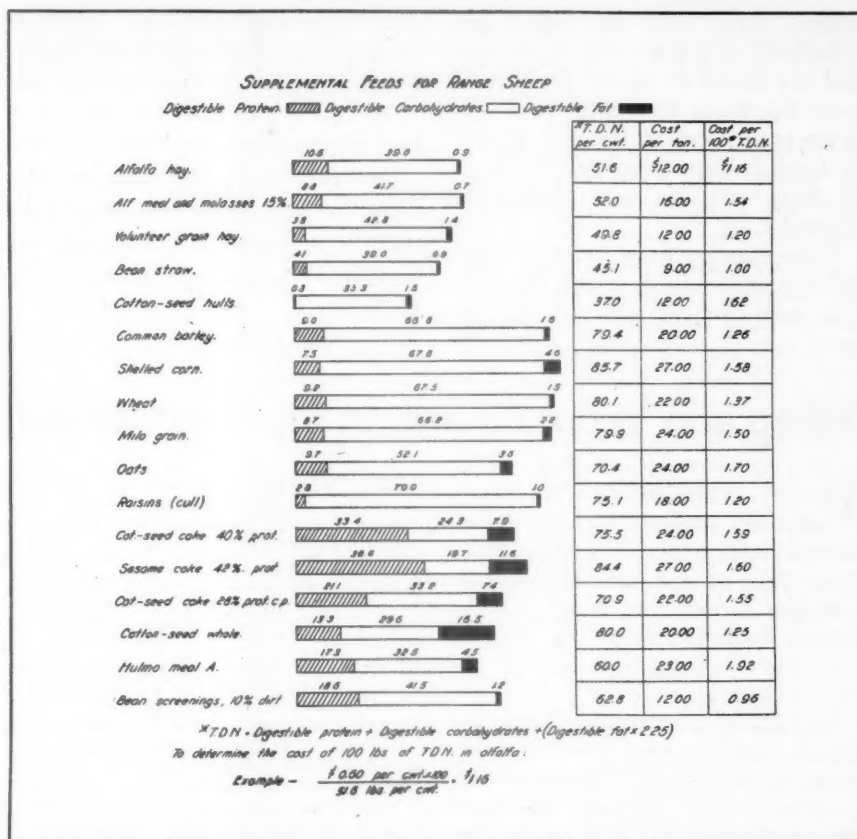
ALL feeds are composed of three principal nutrients, protein, carbohydrates and fat. The protein is the nitrogenous portion, which goes primarily toward the growth of tissue, internal organs, wool, hair and hoof, and for milk and egg production. The carbohydrates (commonly known as the starches and sugars) and the fat are utilized for heat and energy and for mechanical work and body or milk fat.

From this it may be plainly seen that the sheepman should direct his efforts toward supplying "protein" for ewes in advanced pregnancy or those having lambled and required to produce milk. The roughages to consider in this respect are alfalfa hay and bean straw and among the concentrates the oil meals and bean screenings.

Alfalfa hay is an excellent feed and provides the protein and minerals for pregnant ewes as well as stimulating the milk flow. It should be fed with caution, however, as to the daily allowance to avoid lambing paralysis. Bean straw is a cheap feed and, although it lacks many of the essential qualities of alfalfa, it may well be utilized where transportation is not too costly.

Either the cottonseed or sesame cake are very strong protein feeds. In general the hot pressed cake is most economical but where sheepmen are very short on dry grass, the cold press cottonseed cake is most desirable, as it contains about 25 per cent hulls which serve as a roughage.

In reference to the oil meals, the choice quality of cottonseed cake, namely, 43 per cent crude protein and the sesame cake, namely, 42 per cent crude protein, are comparable.



Both of these carry a very high percentage of crude protein. The sesame cake is about 45 per cent higher in fat and also somewhat higher in protein than the prime of 40 per cent cottonseed cake as indicated on the feed chart. Some sheepmen may be able to buy the whole cottonseed rather cheaply as it comes from the gin. It is satisfactory, although it carries 19 per cent fat and for that reason not over one-fourth pound per ewe per day should be fed and preferably in conjunction with some other feed. Commercial Hulmo Meal A has a favorable composition as a feed for range ewes, although the cost per unit of total digestible nutrients is too high in comparison with other feeds.

Bean screenings or "splits" have been used with good results, but the grower should look closely to quality and avoid excessive amounts of "dirt or adobe" because some grades run as high as 30 per cent dirt, which is liable to cause indigestion.

In reference to the grains, of course California barley is our most common feed and whole barley can be fed with good success in conjunction with alfalfa hay or green feed. Troughs are required to feed barley, which makes it impractical in many cases with range ewes, and again barley carries very little vitamin A (one of the dietary essentials), and is 3 per cent lower in fat than yellow corn. Shelled corn can be readily fed on the hard ground and for range ewes corn is cheaper at \$25.00 than barley at \$20.00 per ton and some men make even a greater differential than this.

Wheat compares favorably with barley as to composition, although the kernels are very hard and it would be better to feed cracked or rolled wheat. Brown milo grain and Egyptian corn are also similar to barley, but these carry more of the vitamin A and may be fed with good results. Oats are an excellent feed but usually too high in price and often in California, for in-

stance, feed oats are light and "chaffy." Oats furnish more bulk and are lower in actual pounds of total digestible nutrients than the other grains and where it is desired to furnish some roughage it would be cheaper to feed cold pressed cottonseed cake.

The chart on page 29 gives a detailed comparison as to the composition and cost of 100 pounds of

total digestible nutrients in these feeds. The amount of total digestible nutrients in 100 pounds of feed expresses the practical value of a feed disregarding the finer technical ingredients such as vitamins and minerals and, therefore, should be used as a guide in comparing the nutritive value and economy of feeds.

Sheep and Wool Awards at the International

THERE were no indications of lack of quality in sheep or of interest among breeders around the sheep ring at the International at Chicago, during the week of November 30 to December 5.

Carloads

In carload classes for lambs the grand championship was again taken by Robert McEwen and Sons, London, Ontario, Canada, who have had this honor in eight of the last eleven shows on pure bred Southdowns. This year's load averaged 83 pounds and sold at \$18.25 per hundred to Armour & Co.

In carlots of range lambs first went to Purdue University on a load of Southdown-Corriedale crosses, bred at the U. S. Sheep Experiment Station, Dubois, Idaho. Second and third in this class and first in the class for eastern raised lambs from range ewes went to Marshall Bros. of West Chicago, on lambs bred by the Wood Live Stock Co., Spencer, Idaho.

THE HAMPSHIRE BREEDING CLASS

Judge: Frank Brown, Jr., Carlton, Ore.

Aged Rams (3 shown): 1, R. E. Pullin, Waterloo, Iowa; 2 and 3, J. E. Snell & Sons, Shelbyville, Mo.

Yearling Rams (6 shown): 1, Mount Haggin Land & Livestock Company, Anaconda, Mont.; 2, Minnie Miller, Wendell, Idaho; 3, Mt. Haggin Land & Livestock Company; 4, Minnie W. Miller; 5, J. E. Snell & Sons.

Ram Lambs (11 shown): 1, Mount Haggin Land & Livestock Company; 2, 3 and 4, Minnie W. Miller; 5, Mount Haggin Land & Livestock Company.

Champion Ram: Mount Haggin Land & Livestock Company, on ram lamb. **Reserve:** Mount Haggin Land & Livestock Company, on yearling ram.

Three Ram Lambs (5 shown): 1, Minnie W. Miller; 2, Mount Haggin Land & Livestock Company; 3, Minnie W. Miller; 4, Sherwood Brothers; 5, J. E. Snell & Sons.

Yearling Ewes (11 shown): 1, Mount Haggin Land & Livestock Company; 2, Minnie W. Miller; 3 and 4, Mount Haggin Land & Livestock Company; 5, Minnie W. Miller.

Ewe Lambs (12 shown): 1, 2 and 3, Mount Haggin Land & Livestock Company; 4, and 5, Minnie W. Miller.

Champion Ewe: Mount Haggin Land & Livestock Company, on yearling ewe. **Reserve:** Mount Haggin Land & Livestock Company, on ewe lamb.

Three Ewe Lambs (5 shown): 1, Mount Haggin Land & Livestock Company; 2, Minnie W. Miller; 3, Sherwood Brothers; 4, Emma Duis; 5, J. E. Snell & Sons.

Get of Sire (5 shown): 1, Mount Haggin Land & Livestock Company; 2 and 3, Minnie W. Miller; 4, Sherwood Brothers.

Flocks (4 shown): 1, Mount Haggin Land & Livestock Company; 2 and 3, Minnie W. Miller; 4, J. E. Snell & Sons.

Shepherds' Prizes Special: 1, Thos. Drummond of Mt. Haggin Land & Livestock Company, Gold Medal; 2, Cecil Hartwell of Mrs. M. Miller, Silver Medal; 3, Frank Sherwood of Sherwood Brothers, Bronze Medal.

THE RAMBOUILLET BREEDING CLASSES

Judge: Robert F. Miller, Davis, California.

Aged Rams (7 shown): 1, King Bros. Co., Laramie, Wyo.; 2, University of Illinois, Urbana, Ill.; 3, W. A. Lovett, Zanesfield, Ohio; 4, King Bros. Co.; 5, W. A. Lovett; 6, King Bros. Co.; 7, W. A. Lovett.

Yearling Rams (6 shown): 1, King Bros. Co.; 2, W. A. Lovett; 3, King Bros. Co.; 4, W. A. Lovett; 5, King Bros. Co.; 6, W. A. Lovett.

Ram Lambs (16 shown): 1, University of Illinois; 2, Oklahoma A. & M. College, Stillwater, Oklahoma; 3, King Bros. Co.; 4, Michigan State College, E. Lansing, Mich.; 5, Oklahoma A. & M. College; 6, W. A. Lovett; 7, King Bros. Co.; 8, Michigan State College.

Champion Ram: King Bros. Co. on aged ram.

Reserve Champion Ram: University of Illinois on ram lamb.

Three Ram Lambs (5 shown): 1, Oklahoma A. & M. College; 2, University of Illinois; 3, King Bros. Co.; 4, Michigan State College; 5, W. A. Lovett.

Yearling Ewes (12 shown): 1 and 2, University of Illinois; 3, W. A. Lovett; 4, King Bros. Co.; 5, University of Illinois; 6, King Bros. Co.; 7, Oklahoma A. & M. College.

Ewe Lambs (14 shown): 1, University of Illinois; 2, King Bros. Co.; 3, University of Illinois; 4, W. A. Lovett; 5, 6 and 7, Oklahoma A. & M. College.

Champion Ewe: University of Illinois on yearling ewe.

Reserve Champion Ewe: University of Illinois on ewe lamb.

Three Ewe Lambs: 1, University of Illinois; 2, Oklahoma A. & M. College; 3, King Bros. Co.; 4, W. A. Lovett; 5, King Bros. Co.

Get of Sire (6 shown): 1, King Bros. Co.; 2, University of Illinois; 3, Oklahoma A. & M. College; 4, W. A. Lovett.

Flocks (6 shown): 1, University of Illinois; 2, King Bros. Co.; 3, W. A. Lovett; 4, Oklahoma A. & M. College; 5, King Bros. Co.; 6, W. A. Lovett.

THE WOOL SHOW

Judge: Dean J. A. Hill, Laramie, Wyo.

Market Grades

Fine Combing (28 shown): 1, King Bros. Co., Laramie, Wyo.; 2, Frank C. Clarke, Laytonville, California; 3, Frank C. Clarke; 4, W. C. Hendee & Son, Pinckney, Michigan; 5, King Bros. Co.; 6, F. S. Freeman, Lowell, Michigan.

One-Half Blood Combing (12 shown): 1, D. L. Chapman & Son, So. Rockwood, Michigan; 2, King Bros. Co.; 3, G. W. Rugg, Pilot Rock, Oregon; 4, J. L. Rapstad, Big Timber, Mont.; 5, J. M. McHaffie, Clayton, Indiana; 6, King Bros. Co.

Three-Eighths Blood (19 shown): 1, King Bros. Co.; 2, Crane Ranch, Santa Rosa, Calif.; 3, Armstrong Brothers, Fowlerville, Michigan; 4, King Bros. Co.; 5, Iowa State College, Ames, Iowa; 6, D. L. Chapman, So. Rockwood, Michigan.

One-Fourth Blood (17 shown): 1, Eugene Tribble, Lodi, Calif.; 2, King Bros. Co.; 3, C. H. Davison, Nampa, Idaho; 4, Chas. Sexton, Ferguson, Iowa; 5, Michigan State College, E. Lansing, Michigan; 6, Iowa State College.

Low One-Fourth Blood (13 shown): 1, Archie C. Stewart, Abbotsford, B. C.; 2, Carl Davis, Mt. Vernon, Oregon; 3, Eugene Tribble, Lodi, Calif.; 4, Brownell Ranch, Woodland, Calif.; 5, C. E. Grelle, Portland, Oregon; 6, W. P. Wahls, Halsey, Oregon.

Braid (16 shown): 1, H. C. Skinner, Dimondale, Michigan; 2, H. C. Skinner; 3, T. A. McAlpin & Son, Villisca, Iowa; 4, Clarke Wellman, Perry, N. Y.; 5, Michigan State College; 6, Miss Leila McDonald, Missoula, Mont.

Champion Fleece: King Bros. Co.

Reserve Champion Fleece: King Bros. Co.

Separate prizes were also offered on ram and ewe fleeces from each of twelve breeds. In this class King Bros. also had the championship and grand championship on Rambouillet fleeces. Eugene Tribble, Lodi, California, won in a show of 5 Romney ram fleeces and 9 ewe fleeces. In Oxfords, Shropshires, Hampshire and Dorsets most of the prizes went to the colleges.

The Lamb Markets in December

Chicago

ANOTHER fallacy has been exploded, low levels do not stabilize prices. The December lamb market was off-again-on-again in such bewildering and inexplicable manner as to demonstrate this.

During the third week of the month, trade all but went to sleep; early the following week a display of pyrotechnics occurred, inexplicable because it was unheralded. During the comatose period, the practical packer top on lambs was \$5.00 per hundredweight at Chicago, which goes "away back." Previously, the top had been \$6.25; on the low spot the actual or shipper top was \$5.35. From that point it went back to \$6.00 within a week. This is a swing of \$125.00 per car. On the low spot nothing but dolorous news came from the dressed market; the product was reported piling up with scant prospect of a clearance. At the week-end, December 19, one Chicago packer went over with 7,000 unkillable lambs, which was expected to keep that concern out of the market early the following week, but, to the surprise of the trade, it was an active buyer carrying the common price up to \$5.50, the top to \$5.75. What happened over the week-end is a mystery, but it is a logical inference that killing gangs got behind with their job, that the product was moving and that the dressed market had been libeled. It is sufficient that after a week's heavy "buy," killing gangs handling all they could get, that the market was in receptive mood, suspicion generating that the \$4.75 to \$5.00 market at the low spot, both of December and 1931 was not justified. This was confirmed by the fact that packers paid up to \$5.75, all through Christmas week, shippers competing on a \$5.85 to \$6.00 basis.

The early December market had a promising appearance. The first week shippers paid up to \$6.10, packers to \$5.85. Early in the second week, both packers and shippers paid up to \$6.25, the market fluctuating within a 25-cent range during the first half of the month, but during the week beginning December 14, demoralization set in and by December 17 prices were off 50 to 75 cents, with prime stock at \$5.25, an outside bunch at \$5.35, and more lambs selling at \$4.75 to \$5.00 than any other price. Holiday week the trading level reacted to \$5.50 to \$5.75 on packer account, \$5.85 to \$6.00 on shipper account with a few overweights vending at \$5.25. This, in brief, is the story of the December market. The break of the third week and the reaction of holiday week have not been satisfactorily explained. As usual, sorts were heavy at the low level, light on the advance which made actual fluctuations greater than the figures indicate.

December was a month of heavy slaughter together with unseasonably high temperatures, both adverse conditions, but killers were always buying for numbers while insisting that the dressed market was glutted, a plausible statement under the circumstances although somewhat discredited by an overnight jump of 50 cents per hundredweight in the price of lambs.

A similar condition existed in the cattle market with the exception that cattle supply was reduced 70 per cent to cope with an emergency, while lambs kept coming. The big run of the month was the week ending December 12 when 385,000 head reported at ten markets, but if that gob created slight congestion in distributive channels, it was promptly relieved. The following week when the big break occurred, only 320,000 reported at the ten major markets.

Dressed trade was as erratic as the live market, varying \$1.00 per hundredweight within a few days. Quality of supply was excellent, cull meat being scarce. Good to prime handyweight carcasses sold at \$14.00 to \$16.00, culls around \$7.00. A few selected carcasses realized \$17.00 at New York, show carcasses making \$25.00 to \$27.50. A low spot developed during the week ending December 19, coincident with the break in live lambs, when \$13.00 to \$14.00 took the best end of supply at Chicago, New York holding up to \$15.00 to \$16.00, with a cleanup trade of \$10.00 to \$13.00. The stated policy of killers is to clean up each week regardless of what the stuff realizes, which may be an explanation of erratic live market prices. Possibly salesmanship in the dressed sphere is open to criticism.

Fat sheep are in the same unfavorable position. Packers are fighting for volume in dressed lamb trade but sidestep mutton. Carcass mutton is wholesaling in limited quantities at \$4.00 to \$8.00 per hundredweight; fat ewes are poor property on the live market at \$2.00 to \$2.50 per hundredweight. American consumers evidently do not want mutton at present prices. Put it into the luxury category and they might clamor for it. There has been a limited demand for 3-year-old breeding ewes weighing around 125 pounds at \$3.00 to \$3.25, prices that suggest excellent investment.

The run has carried a short percentage of lambs weighing 95 pounds up, consequently discrimination against weight has not been severe, but already there is a penalty of 75 cents per hundredweight, when weight flirts with 100 pounds. In December native lambs all but disappeared, 75 per cent of the run being fed westerns from the corn-belt, Wyoming, Idaho, and North Dakota mainly, the bulk weighing

80 to 90 pounds with a sprinkling at 94 to 96 pounds.

J. E. Poole

Kansas City

ON December 18 and 19 fat lambs sold at \$4.85 down, the lowest prices since 1901, around \$3.50 under the top in December, 1930, but otherwise \$5.50 to \$13.50 under the December tops from 1916 to 1930. Feeders doubtless found prices too low to be encouraging, but considering general conditions the lamb market performed in a highly creditable manner.

The outstanding depressing factors were: hogs selling under \$4 a hundred pounds, the lowest since 1899; drastic declines in fat cattle; muddy feed lots and fields, and above all too much talk about the depression and hard times. On the other hand the stabilizing influences were: lowest feed prices in many years, and a meat demand that has been sufficient to keep outlet channels fairly well open. Regardless of the fact that the general impression exists that meat consumption this year has been less than last year, the contrary is true. The total number of animals slaughtered in the first eleven months this year was larger than in the same period last year. There was a moderate decrease in cattle and hogs, but substantial increases in calves and sheep. Stocks of meat in storage December 1 were not substantially different from those on the same date 1930, except a drop in mutton, and were materially short of the December 1, five-year average. In view of the fact that export outlet was curtailed, slaughter maintained and stocks of meats not increased, domestic use of meat must have been large.

While \$4.85 marked the low point of the month there were only two days in the period that \$5 or better failed to appear. The first two weeks made a better average than the last two weeks, and the high point came between the 8th and 11th when tops reached \$5.75. Late in the month \$5.25 and \$5.50 were

recorded to represent an advance of 40 to 60 cents over the low point.

It had been anticipated that the selling side would have difficulty in finding an outlet for some of the short-fed lambs that would show up during the month. Less of this was encountered than many had expected because feeders took those that were too thin for the killers to use, but in the average fed grades were in fairly good condition. As the feeding season advances the offerings will show better finish and they should be more attractive to killers than those offered this month.

The year 1931 will show the largest use of dressed lamb and mutton on record for the United States. It may not be the largest per capita, but it will be the largest in tonnage. The special significance of this to the producer is that in a year of depression lamb and mutton found a broad outlet indicating that it has more than held a relative position in connection with other good commodities.

January can count on having better finished lambs at its disposal than December reported. This will be a favorable factor in the trade. It is also evident that meat channels will not be crowded with fresh pork as they were for the past 60 days. Cold weather would be a favorable factor also. It is fairly safe to figure that December's unfavorable conditions shook out the majority of lambs that were in weak hands and for the most part experienced feeders will dominate the situation for the next 60 days.

One of the most important changes that has developed since the middle of November was the heavy movement of thin lambs into northern Colorado and western Nebraska feeding sections. Sixty days ago it looked as if those two sections would feed comparatively few lambs, but under the prospects for a bare spot late in the season, Colorado feeders got busy and took more than they had figured on. However, this does not alter the fact that the bulk of the corn belt fed lambs will be fairly well out of the way by early Febru-

ary and late fed lambs may fit in fairly well with demand requirements. The abundance of feed that is available in the central belt should guard against part fat lambs being forced into slaughter channels.

Mutton sheep remained in moderate supply. Fat ewes brought \$1.75 to \$2.50; wethers \$2.50 to \$3.25 and yearlings \$3.50 to \$4.50. From the number of fat sheep offered around the entire market circuit the past thirty days it is evident that comparatively few were fed.

The year 1931 established record receipts at the Kansas City Stock Yards, at 2,225,000, or 50,000 more than arrived in 1911 when the former record was made.

C. M. Pipkin.

Denver

THE Denver sheep and lamb market was fairly well supplied during the month of December. Receipts totaled 75,951 head during the month compared to a run of 125,000 head in December a year ago. The decline in the supply here was due to the fact that prices have not been as good as feeders would have liked, and many lambs were held until after the first of the year with the hope that prices would improve. Values were called generally just about steady at the close of December as at the close of November. The market declined sharply early in the month but toward the close there was a material improvement.

Good fat lambs were selling early in December at around \$4.50 to \$4.85. At the close of the month they were selling at about the same prices. Colorado fed lambs sold up as high as \$5.15 toward the end of the month. Feeder lambs were in light offering and the market was rather quiet as there was also a limited demand. Sales ranged from \$3 to \$3.65 for the fair to good feeders toward the close of the month.

The Denver market was well supplied with sheep and lambs during the year 1931, the total of 2,-

490,000 head breaking all records for receipts in one year here. The previous high point was in 1925 when 2,357,010 head arrived.

Demand was good here during the entire year and prices paid for all classes of sheep and lambs were fully in line with those prevailing at all eastern markets. Not infrequently values at Denver were higher than at the river markets and close to the extreme top at Chicago. Eastern buyers were active here during the year, many lambs going for shipment to the eastern seaboard.

W. N. Fulton.

St. Joseph

SHEEP receipts for the month up to and including the 24th are around 80,500, a decrease of about 8,000 compared with the same period a year ago. Receipts for the year to date are around 60,000 less than a year ago. The lamb market during the month was uneven, the top ranging from \$5.00@5.75, the latter figure being reached on the 8th and again on the 24th. Compared with the close of November values are 25@35 cents higher. Natives sold up to \$5.50 on the close. Clipped lambs sold about in line with wool-skins throughout the month.

Quite a few loads of fed Texas lambs were marketed at \$4.65@5.25. A few loads of feeders sold during the month at \$4.00@4.50.

Aged sheep held steady throughout the period. Fat ewes mostly \$2.00@2.50, with one load of Texas at \$2.60. Native yearlings \$3.50@4.00 and fed kinds \$4.25@4.85.

H. H. Madden.

Omaha

MARKETING of sheep and lambs, mostly lambs, has been relatively heavy this month. So far as Omaha is concerned, receipts to date have been the heaviest for any corresponding period in the last five years and about 20,000 ahead of a year ago. Seven main western markets have reported approximately

100,000 more than they did during the same period a year ago.

Response of fat lamb prices to increased supplies has been extremely erratic. Seldom has the market been so temperamental or widely variable as during the last three weeks.

During the first week of December lethargy overcame the trade. At that time packers had the price for best fat lambs pegged at \$5.25 and, no matter how much they needed

supplies, refused to pay one cent more. But, if the market was stable then, it was more than made up in the days following. In two days prices shot up 50@75 cents, only to lose all of the advance and another quarter to boot within 24 hours.

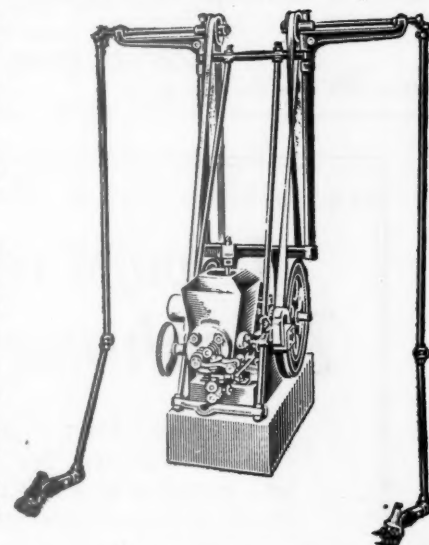
That break put the market at the lowest level since September, 1908, and with that exception, since the fall of 1904, with the extreme top at \$4.90 and packers stopping at

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\$4.75. One packer refused to pass \$4.50 then and managed to get some good lambs on that basis.

Following that orgy, came a 50 cents upturn on the 21st, and then a decline of 25@35 cents.

The week from the 7th to the 11th, inclusive, marked the high point of the month, with a top of \$5.75 and the bulk selling at \$5.25@

5.60. Very few natives are coming now and very few shorn lambs. On those that do arrive out of the wool there has been a tendency on the part of buyers to make a spread between them and woolskins. Shearlings are reported to be selling at the lowest level in years.

Shippers have given the market here good support all month, local

purchases for slaughter at other points running considerably in excess of a year ago.

On the other hand, muddy feed lots and an undertone to the fat lamb market that is anything but firm, combined to take away interest in feeding lambs and not as many have gone out so far as was the case in December, 1930. Prices have changed but little, ranging from \$4 up to \$4.50 at times on best fleshy offerings, with others selling on down to \$3.50 and under.

After reaching a new recent top of \$2.65, fat ewe prices have settled back to about the same basis as prevailed all fall, or at \$2.25 down in most instances. The market largely nominal on aged stock of all kinds.

K. H. Kittoe.

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(From the Report of the Bureau of Animal Industry.)

Around the Range Country

(Continued from page 14)

Utah

Abnormally cold weather prevailed until near the close, and snow covered the state generally, being rather deep most of the time over most counties. The cold weather finally began to tell on livestock and some shrinkages and a few losses were reported prior to the warm spell. Farm stuff has been on full feed, and in fairly good condition; while more or less grain was being fed to range flocks and herds where practicable, as the scanty forage was rather badly snow covered.

Vernal

It is very cold at this time (December 19) and we are feeding some corn. Prospects for feed on the winter range are about average. Twelve dollars is the price of alfalfa hay in the stack.

About ten per cent fewer ewes are being bred than a year ago.

Coyotes do not seem to be so troublesome as they have been in previous years. I believe this is due to the fact that trappers have been working in this vicinity.

The way I figure it, sheepmen have been able to reduce their production costs in the last two years by about 75 cents per head.

Leo Calder.

Colorado

Moderate to heavy snow covering prevailed during the first half of the month, and while a chinook carried away much of it later, snow and moisture were still ample. Livestock feeding was rather heavy in all sections, because of abnormally cold weather and general snow covering. Some feed shortages are reported in southeastern counties. Livestock are mostly good in western counties, and fair to good in the east. The cold weather persisted over western counties late in the month.

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Sanford

The ranges are now covered with snow (December 19) and hay and concentrates are being fed. Alfalfa hay is priced at \$10 a ton in the stack.

Fewer ewes by 10 per cent are being bred this season.

Coyotes are less troublesome due to the predatory animal control work.

Very little if any reduction in production costs has been made in this section.

F. T. Christensen.

New Mexico

Heavy snow covering generally early in the month was beginning to show its bad effects on livestock, but milder weather later carried much of the snow away and relieved the stress on flocks and herds. Snow is practically gone in southern counties, but it is still deep and badly crusted over the northwestern portion where cold weather has continued. In this region livestock shrinkages have continued, as forage and supplemental feeds are scarce. Generally, however, ranges and livestock are in fair to good condition.

Roswell

There has been plenty of snow and moisture within recent weeks, and feed conditions are now excellent (December 14). The winter range is good. Baled hay can be had at \$10 to \$12 a ton; in the stack it is \$4 and \$5.

It is difficult to say how much breeding operations have been reduced this fall, but certainly fewer yearlings are being bred.

Coyotes are more troublesome as the ranchers have no funds for trapping or bounty payments.

Taxes and lease charges are about the same as in other years, but labor and food is cheaper, also cottonseed cake. Generally speaking, I think operating costs are about 10 per cent lower.

F. W. Haegler.

Arizona

Moderately cold weather prevailed, with ample moisture in nearly all sections, the intermediate and higher levels being covered with snow during most of the month. In some of the more important sections livestock and ranges are reported to be in good condition; though in a number of the more elevated areas, deep snow and persistent cold weather have caused suffering and shrinkages among livestock, necessitating considerable feeding to maintain even a fair condition among livestock. Some watering places were frozen over, to the detriment of grazing.

White River

An exceptionally heavy snow has hit this White Mountain district and covered a lot of grass range that had been depended upon by stockmen. The winter feed is very good on account of the plentiful rains received last fall.

Breeding operations in this section will be about 30 per cent less than those of a year ago.

R. M. Fish.

Western Texas

Livestock conditions are from fair to good generally, resulting from rather satisfactory range conditions in most sections, though it has been too cold in the west at times, and in places too much snow. A moderate but general snowfall occurred just after the middle of the month, and light showers a little later, though the last two weeks have been mostly fine and mild. Generally speaking the weather has been as good as normal, if not a little better in places. A heavy snow occurred over nearly all of the Panhandle before Christmas; livestock shrank some, but no losses were reported.

The Program for Increasing Western Game in Relation to Forest Grazing

By GLYNN BENNION

EVERY year in May or June a committee of representatives from the National Forest Service, the National Park Service, the State Game Department of Arizona and other interested parties meet on the Kaibab mountain for the purpose of studying the situation created there by the overstocking of deer.

This year the committee's investigative trip continued from June 8 to 15.

The party included representatives from the American Game Association, the Campfire Club of America, the National Association of Audubon societies, the Izaak Walton League, the American Society of Mammalogists, the American National Livestock Association, the Arizona Game Protective Association, and a dozen or more forest, park and Biological Survey officials. Eight days were spent by these men riding over the mountain collecting information as to summer and winter range conditions and numbers, increase or losses of the deer herd, then reviewing this detail and deciding what to do about it.

This sort of thing is a perennial affair and has been going on since 1918 when the deer were first suggested as a factor affecting the deplorable decline in forage supply, a condition which since has been aggravated until the Kaibab mountain has become perhaps the most ghastly spectacle of overbrowsed area in the country.

The activities of this committee are interesting to stockmen for several reasons. Of chief significance, perhaps, is the evidence of a growing appreciation of the difficulties and costs to be encountered in any extensive program of game protection. Also, there are valuable lessons to be learned therefrom regarding range management—that the disastrous results of neglect may reach widespread proportions quickly and

that for want of trained observation almost irreparable harm may be done to a range before it is suspected. Then, too, because of recent occurrences and utterances, stockmen will be watching with anxiety anything that wild life enthusiasts may do anywhere.

I suspect that the calling of this investigation committee was inspired by a desire on the part of the Forest Service to pass the buck. Forest officials know what the conditions are on the Kaibab, and that relief can be had only through the immediate slaughter of many if not most of the deer. The difficulty these men have been encountering lies in the fact that superabundance of game is a new idea to the public and the suggestion of drastic measures for reduction has so far been met with strong resistance. That it has become necessary to shoot the deer on a game preserve in order to save their lives was too much a paradox for the uninformed. And since the Forest Service, like any government bureau, cannot ignore the opinion or sentimental idea of a considerable number of organized people, it was doubtless deemed the better part of wisdom to defer action until the interested public could be reached through its representatives and thereby win popular approval of the reduction project.

In the meantime thirteen years have passed with practically nothing accomplished, until last year, toward intelligent management of this phase of the preserve except the collection of voluminous data. Nature has been allowed to take its course. The Kaibab deer herd was formerly kept down by Indians and mountain lions, but with the establishment of the area as a game preserve the government destroyed the lions and put the Indians in their place. Thus with no natural enemies to maintain a balance the deer suddenly in-

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creased far beyond the limits of their food supply and since the year 1924 have been dying by the thousands from starvation and disease.

The Kaibab was proclaimed a game preserve in 1906, at which time the deer were estimated to number 3,000 head. In just 18 years they had reached their peak in numbers, some authorities placing the maximum as high as 100,000 head in 1924. The official 1931 estimate, doubtless conservative, is 20,000.

This natural reduction through starvation, however, has not remedied the forage situation, which is becoming steadily worse every year. By fall there is not a single aspen sprout left on the mountain. There are vast areas where the ground is utterly bare of undergrowth—nothing but piles of dead twigs to indicate where once were thickets of

snowberry and raspberry. On the winter range there are areas where 95 per cent of the cliff rose has been killed out, the bucks using their horns and the does their chins to break down the few remaining live branches. Everywhere the cedars are trimmed bare to a height of 4 to 6 feet. All young spruce, fir and pine trees in the deer area have suffered the constant removal of terminal buds until they resemble very scrubby shrubs. No man can tell what variety of the most palatable weeds and shrubs have already become extinct on the Kaibab. Some experts consider that it will take 50 years to remedy the damage already done.

Let me here very paranthetically and with the best of good will say that I was raised near a forest reserve where the idea is carefully nurtured that the Forest Service is the sacred

repository of every good and efficient and determinedly protective thing for the range; if it were not for whom the greedy, grasping grazers would soon reduce to a desert the most productive areas. So imagine the weird kick I got out of the situation when I looked at this Kaibab mess!

But in all fairness it must be repeated here that without doubt the service long before now would have put into operation its plan of management had it not been for the hindrance of a maudlin popular sentiment and for the part of obstructionist and opportunist played by the state of Arizona, to whom the deer herd belongs. The hopelessly expensive and pitifully inadequate measures heretofore put into operation for relief can also be charged to the necessity of compromising with these hampering factors.

Before and for some time after the Kaibab was proclaimed a game and forest reserve as many as 20,000 sheep and 15,000 cattle were grazed on the area. These numbers have been gradually reduced until now there are around 900 cattle and 2400 sheep on the mountain. This reduction has been almost entirely voluntary, the Forest Service having clung steadfastly to its policy of requiring no reduction of permits of local stockmen. However, after looking at some of those dreadfully emaciated domestic animals grazing on the Kaibab, I felt it no wonder there had been voluntary reductions and that it would be a mercy to the beasts and a financial benefit to their owners to take them all off.

There has been a recent effusion of propaganda in sporting magazines designed for the consumption of eastern outdoor enthusiasts to the effect that western game animals were facing extinction on forest reserves because domestic animals were taking all the feed. Now, not only is the statement that game is decreasing in the West given the lie by the latest Forest Service estimates, but this terrible Kaibab spectacle proves

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beyond all controversy that domestic animals can't compete with wild animals on the range. The Kaibab proves that deer will survive where goats would starve to death, let alone cattle or sheep. It proves that nothing but hunting and the activities of predatory animals check the increase of wild game. Put a stop to both and game will increase anywhere at an astonishing rate, and with probably the same disastrous effects as one sees on the Kaibab.

Another thing to be considered by sportsmen: deer and domestic animals to a large degree eat different kinds of forage plants. In general, deer are browsers, cattle are grass eaters, while sheep prefer weeds. Under a wise and determined system of range management they can all live happily together.

In conclusion, let the Kaibab furnish a lesson in moderation. If we must have deer to look at and shoot at, let's at least have fat, healthy, wild ones. Who can get a thrill of pleasure looking at those hundreds of emaciated, diseased, parasite-ridden creatures, deformed by starvation until they look more like burros than noble game animals, grubbing away at food already chewed into the ground, and whose only fear is of starvation? What sportsman can get a kick out of shooting creatures like that? And as for eating one of them—I prefer coyote.

The Committee's Report

Since the Kaibab Forest has become a national playground and joins the Grand Canyon National Park, the administrative policy toward wild life and forest management there must vary from that of the average national forest. The preservation of wild life as a tourist attraction is of first importance there, whereas the grazing of livestock and other economic uses must be given greater consideration in other forests. However, perpetuation of flora is of as much concern as preservation of fauna, and overgrazing must be corrected if plant

life within the Kaibab area is to be restored to natural conditions.

There exists an urgent need for reducing the present number of deer to a point much below the present limited carrying capacity of the range. When the various species of browse have been reestablished the deer may then be permitted to increase to such numbers as the natural food supply may sustain.

The Kaibab demonstration marks a new era in big game management. It emphasizes the close relationship between game and forest management. Range destruction means game destruction. Excess grazing by deer is more destructive than utilization of the same intensity by either cattle or sheep. Both must

be avoided if our forests and ranges are to be saved. Game preservationists, to be consistent, must oppose overgrazing by game as strenuously as that by sheep or cattle.

The administrative difficulties on the Kaibab seem to have grown out of the fact that the range belongs to the nation and the game to the state.

The rapid increase of big game in many national forests has introduced a new and perplexing factor into national forest management. This new situation with which many states are now confronted makes it apparent that the establishment of extensive game refuges fixed by inflexible legislation, is an unwise procedure in big game conservation.

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